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SOME REMARKS ON THE LANGUAGE OF THE ORIGINAL BUDDHIST CANON*

By

M. A. MEHENDALE

At the very outset let me express my gratitude to the Executive Committee of the All-India Oriental conference for having elected me to preside over the Indian Linguistics Section of this year. It is a great honour no doubt, but I do feel that it would have been better if my election had waited for some more years. With my limited knowledge and experience I feel some embarrassment in executing the duties of this office which was in previous years held by great digniataries whose names are too well-known to Indologists. Perhaps in electing me as sectional President, the Executive Committee has sought to honour my Pūrvācāryas through me. Any way it is with this feeling that I shall proceed with the work and discharge my duties as best as I can.

But before I proceed I have a sad thing to do. It is with a heavy heart that I refer to the sad demise of Prof. Jules BLOCH who passed away soon after the previous session of the Conference held at Ahmedabad. In his death India has lost a good friend and a great scholar. He not only himself contributed a number of valuable articles and volumes on Indo-Aryan and Dravidian Linguistics, but also trained many a young scholar from this country to do important research in this field.

I

In such Presidential Addresses it is customary to take a review of the work done in the field during the last two years. As this was not done at the previous session I am extending the period of review roughly to four years. With the limitations on time I cannot do any more than just refer to some of the important publications, linking these up wherever necessary, with the previous work done in those particular branches. I earnestly beg to be excused for any omission and request the scholars to bring up these to my notice. (I have to point out that while preparing the review I had to omit references to articles published in

* Sectional President's Address delivered at the Indian Linguistics Section of the 18th Session of the All-India Oriental Conference held on 26th-28th December, 1955, at Annamalainagar.

Research Journals and Commemoration Volumes as that would have taken me too far).

Let me start with OIA. With regard to the works of the grammatical nature mention must be made of the second part of the second Volume of DEBRUNNER-WACKERNAGEL'S *Altindische Grammatik* (1954) dealing with the nominal suffixes. The fact that the volume covers about a thousand pages in the treatment of a subject to which about sixty pages are devoted in WHITNEY'S Grammar will suffice to show the comprehensive nature of this book. Another work is L. RENOU'S *Grammaire de la Langue Védique* (1952) describing the stage of Sanskrit as represented in the Saṁhitās. One would realise the importance of this work when one remembers RENOU'S noted contributions in the Vedic and the grammatical fields. Mention may also be made of the fact that RENOU has now completed his translation of the Aṣṭādhyāyī in three volumes, the last of which appeared in 1954. T. BURROW's *Sanskrit Language* (1955) deals with the subject matter from the historical point of view and takes into account also the evidence of Hittite. J. GONDA has published certain important monographs like *Remarques sur la Place du Verbe dans la Phrase Active et Moyenne en Langue Sanscrite* (1952). *Ancient Sanskrit ojas, Latin *augos, and the Indo-European Nouns in -es/-os* (1952), and *Reflections on the Numerals "one" and "two" in Ancient Indo-European Languages* (1953).

In the wake of Siddheshwar VARMA'S work on *Phonetic observations of Indian Grammarians* we have now a very good appreciation of ancient Prātiśākhya and Śikṣā texts in W. S. ALLEN'S *Phonetics in Ancient India* (1953). M. B. EMENEAU's *Sanskrit Sandhi and Exercises* (1952) in a good book for the use of descriptive linguists. Siddheshwar VARMA's book on the *Etymologies of Yāska* (1953) is a refreshing study discussing which of the etymologies of Yāska may be considered acceptable and which not. Among the works of the type of Dictionaries, reference may be made to SURYA KANTA'S *A Grammatical Dictionary of Sanskrit (Vedic)* (1953) with an Index to WACKERNAGEL'S first volume of *Altindische Grammatik* and first 82 pages of MACDONELL'S *Vedic Grammar*. The fifth part of the *Kurzgefasstes Etymologisches Wörterbuch des Altindischen* (1955, started in 1953) by M. MAYRHOFER, and 9th part of *Indogermanisches Etymologisches Wörterbuch* (1955, started in 1948) by J. POKORNY have recently arrived. J. GONDA in his *Sanskrit in Indonesia* (1952) ably discusses the history of Sanskrit vocables in the Indonesian languages.

Equally important works have appeared in the field of MIA. H. LUEDERS' *Beobachtungen über die Sprache des buddhistischen Urkanons*

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(1954) has been edited from the Nachlass by E. WALDSCHMIDT. LUEDERS had already given expression to his view that he believed in an original canon composed in an eastern dialect from which the Pāli and the Sanskrit versions were translated. This book gives the evidence which led LUEDERS to this belief and his observations on the nature of the eastern language. In this respect F. EDGERTON holds the opposite view—that we cannot speak of an original canon—which he has expressed in the Introduction to his excellent account of the *Buddhist Hybrid Sanskrit, Grammar and Dictionary* (1953). A summary of the Grammar and an account of the BHS literature can also be found in EDGERTON'S Lectures on *Buddhist Hybrid Sanskrit* published by the Banaras Hindu University (1954). J. BLOCH'S book *Les Inscriptions D'Asoka* (1950) is a very valuable publication since E. HULTZSCH published his work in 1925 and it testifies to the author's grasp on the Indo-Aryan field. The new book includes all the finds except the recently discovered versions of the minor rock edict at Rajula-Nandagiri in the Andhra and at Gujarra in the Vindhya Pradesh.*

The very extensive field of MIA has been ably covered by S. K. CHATTERJI in his Wilson Philological Lectures delivered at the Bombay University (1954), the publication of which will be eagerly awaited. M. MAYRHOFER'S *Handbuch des Pāli* (1951) is primarily intended for the Indogermanist who wishes to know the nature of a MIA language. Sukumar SEN'S *Comparative Grammar of MIA* (1951) is now followed up by his *Historical Syntax of MIA* (1953). No other book on MIA syntax has been written since José CANEDO wrote *Zur Wort- und Satzstellung in der alt- und mittleindischen Prosa* (1937). G. DAVANE'S Ph.D., dissertation, completed under the guidance of S. M. KATRE, on *Nominal Composition in MIA* has now been published by the Deccan College Research Institute (February 1956). In this field also no work appeared since W. GBABOWSKA wrote on the nominal composition in the Aśokan inscriptions (*Ro* 1927). Very interesting are also a couple of articles by De VREESE on Apabhraṁśa studies in *JAOS* 74.1-5; 142-146. Fresh material for the study of Apabhraṁśa is made available by the edition of Paumacariu of Svayambhū by H. C. BHAYANI (1953). P. B. PANDIT'S three lectures in Hindi on *Prākṛta Bhāṣā* delivered at Banaras Hindu University were published last year (1954).

Scholars are not lagging behind in the NIA field. A book on general Phonetics written with special application to Marāṭhī is *Dhvani-*

* Since the Address was read out, the discovery of a version of the ninth rock-edict of Aśoka, near Bombay, has been announced by N. A. GORE in "Times of India" dated 4th January, 1956.

vicāra (1955) by N. G. KALELKAR. It is a good example showing how a subject can be made easy when suitable examples are drawn from the language of those for whom the book is intended. *Phonetic and Phonological Study of the Word in Urdu* by Masud HUSAIN appeared this year (1955). Similar work on Bhojapuri by B. N. PRASAD and on Aspiration in Oriya by G. B. DHALL are awaiting publication. Though not in a book form I may mention here articles in Hindi on general phonetics like 'Varṇa-mīmāṁsā' and 'Varṇa-uccāraṇa' by Siddheshwar VARMA published in the *Kalpanā* of Hyderabad.

On Hindī and its varieties some important books have appeared. I may mention here Dhirendra VARMA's work on *Vraja-bhāṣā* (1954), Baburam SAKSENA'S lectures on *Dakkhinī Hindī* (1952), and U. N. TIWARI'S work on *Bhojapurī Bhāṣā aur Sāhitya* (1954), and *Hindī Bhāṣā kā Udgama aur Vikāsa* (1955).

A. K. PRIYOLKAR may be congratulated for having brought to light (1954) the hitherto unknown first Marāṭhī Grammar written in Marāṭhī by Marāṭhī scholars. It was composed in about 1824 by KRAMAVANT, PHADAKE and GHAGAWE Shastris. An account of the Gujarātī translation of this work by the same Shastris serving as the first Gujarātī Grammar is given by K. B. VYAS in the *Journal of the Gujarat Research Society*, 17.287-299, 1955. PRIYOLKAR has also given us last year an English rendering of the Portuguese *Grammatica Marasta*, a book written by a missionary and first published in Rome in 1778 describing the dialect spoken round about Bombay. *Linguistic Peculiarities of Jñāneśvarī* was published by M. G. PANSE (1953) on the basis of a manuscript which in the opinion of the author is the oldest so far traced (A.D. 1350). A work written in old Gujarātī or old western Rājasthānī viz. Kānhaḍade Prabandha has been critically edited by K. B. VYAS (1955).

As regards books written in Indian languages on certain aspects of linguistics, I may mention *Arthavijñāna* (1951) in Hindī by Baburam SAKSENA, *Śabda ane Artha* (1955) in Gujarātī by Bhogilal SANDESARA, *Śabda-Udgama va Vikāsa* (1953) in Marāṭhī by K. P. KULKARNI, *Arthavijñāna āṇī Marāṭhī Bhāṣā* in Marāṭhī by S. G. TULPULE and Usha POTDAR (GHATE) (in the Mahārāṣtra Sāhitya Patrikā, 1953), *Gujarātī par Arabī Phārasīnī Asar* (1954) in Gujarāti by C. R. NAIK, and *Vāg-vyāpāra* (1955) in Gujarātī by H. C. BHAYANI. Though not in an Indian language I may mention here also *Lectures in Linguistics* by O. L. C. AGUILAR (1954).

In the field of Dravidian Linguistics I may refer to R. G. HARSHE'S authorised English translation (1954) of *The Grammatical Structure of*

Dravidian Languages by J. BLOCH which very clearly brings out the chief characteristics of this group of languages. N. LAHOVARY'S *Substrat Linguistique Méditerranéen, Basque et Dravidien* brings out the affinities between these two families of languages and seeks to establish that Dravidian was originally a speech of the big mediterranean family of languages. With regard to the studies of the individual languages I may mention R. P. Sethu PILLAI'S *Words and their Significance*: *A Study in Tamil Linguistics* (1952), C. R. SANKARAN'S *Some Problems in Kannaḍa Linguistics* (1954), and A. C. SEKHAR'S *Evolution of Malayalam* (1953). Murray FOWLER'S phonemic analysis of the Sanskritized literary Tamil spoken in Madras is presented in the article 'The Segmental Phonemes of Sanskritized Tamil, *Language*, 30.360-367 (1954). T. BURROW and S. BHATTACHARYA in their book on *Parji Language* (1953) establish that it is an independent language and not a dialect of Gondi. Of great interest is the English version of 17th century Dutch Grammar of Tamil by J. A. B. van BUITENEN and P. C. GANESHSUNDARAM in the *Bull. DCRI.* Vol. 14. 168-182 (1952). The Jules Bloch Memorial Volume as well as the Chatterji Jubilee Volume of *Indian Linguistics* (Vol. 14, 1954 and Vol. 16, 1955) contain many important articles on Dravidian linguistics. I may also mention here the article on Dravidian kinship terms by M. B. EMENEAU in *Language* 29. 339-353 (1953). A. D. TASKAR was recently awarded Ph.D. by the Poona University for his work on 'Intonational Patterns in Indo-Aryan and Dravidian' which he completed under the guidance of C. R. SANKARAN. A new approach to the typology of phoneme and morpheme distributions as well as a semanto-phonetic study of Dravidian morphemes is being carried on by P. C. GANESHSUNDARAM under the guidance of C. R. SANKARAN. Chaitanya Deva's work on *The Tonal Structure of Tambura*, which he completed under the guidance of C. R. SANKARAN, awaits publication.

C. R. SANKARAN takes his departure from the usual and time-honoured approaches towards the problem of speech-structure by considering the 'between' (which 'non-temporal-wedge' he calls alpha-phoneme) in any consonant vowel configuration as the starting point of his investigations. This departure from the conventional outlook in Phonetics at all levels has led him to a unification of different levels of experience like the articulatory (or auditory—i.e. neuro-physiological) and the physical (the acoustical). Such a study of the 'inter-phenomenon' (or 'the between') to which he was led by consideration of such phenomena as marginal speech-sounds, glides, or more particularly the so-called *āytam* in old Tamil which has served as a pointer in all his investigations, has taken C. R. SANKARAN far beyond to abstract and symbolic levels of thinking as reflected in many of his latest writings

published in the Bulletin of Deccan College Research Institute which includes his Presidential Address at the last session. I may add that a paper of C. R. SANKARAN and his collaborators on 'Structure in Speech—The Physical Reality of the Phoneme' is awaiting publication in the Sonderheft of the *Fernmelde-technische Zeitschrift* of Bonn.

II

I shall now turn to say some words on a problem which I think is of some importance to the study of MIA languages. I had originally planned to give a critical review together of LUEDERS' *Beobachtungen über die Sprache des buddhistischen Urkanons* and EDGERTON'S *Buddhist Hybrid Sanskrit Grammar*, to both of which I have already referred. This has, however, not been possible. My review of the first part of LUEDERS' *Beobachtungen* has been already published in the 17th Volume of the *Bulletin of the Deccan College Research Institute* (1955) pp. 53-75. I therefore planned to give a review of the second part of LUEDERS' book as the main theme of my talk today. Considerations of time again have compelled me to restrict myself only to a few points.

In the Zweites Hauptstück of this book are included LUEDERS' views regarding the phonological and morphological peculiarities of the eastern language of the original Buddhist canon. About the former, we get a detailed discussion of such phenomena as the softening of surds, loss of intervocal consonants, and the treatment of the consonant clusters. About morphology, however, what has survived is only the late Professor's remarks on the flexion of the nominal stems in *-a*.

In order to assess the phonological peculiarities of the original canon, LUEDERS starts from what he considers to be the eastern characteristics of the Aśokan inscriptions, and if he finds that these same also occur in some instances in Pāli, he regards them as borrowings from the east. For the solution of this problem, then, it is of importance to examine the Aśokan data very critically and come to certain conclusions as to what may be called eastern and what non-eastern in the Aśokan inscriptions.

LUEDERS regards softening of the voiceless stops as an eastern characteristic and for this he gives instances of the change of *k*>*g*, *t*>*d*, *kkh*>*ggh*, and *ṭṭ* or *ṭṭh*>*ḍḍ* or *ḍḍh*. For the change of *k*>*g* he cites (§ 87) the following from the Aśokan evidence :—Sk. *loka*>*loga* (cf. *hidaloga*, *palaloga*) in the Jaugaḍa separate edict and Sk. *adhikṛtya*> *adhigicya* in the Calcutta-Bairāṭ inscription.

Now in a paper published in the *Journal of the Oriental Institute*, Baroda, Vol. I. 240-244 (1951-52) I have shown that the two separate

edicts at Dhauli and Jaugaḍa show certain peculiarities which are never to be found in the versions of the major rock edicts at these two places. Further, as these peculiarities are found in the other non-eastern regions, it is legitimate to conclude that these peculiarities of the separate edicts are not to be considered as eastern but to be due to non-eastern influence. Among these comes the softening of the vioceless stops. The instance *loka* : *loga* cited from the separate edict, therefore, cannot be brought forward to establish that softening was an eastern feature. The case would have been certainly otherwise if such an instance were available also from the versions of the major rock edicts at Dhauli and Jaugaḍa.

As regards *adhigicya* it may be pointed out that the find-spot of the Calcutta-Bairāṭ inscription is the head-quarters of a tahasīl in the Jaipur State, and an instance of voicing from this inscription, unless corroborated by other evidence, can hardly be considered as showing that particular feature as an eastern characteristic.

About the change *t*>*d*, LUEDERS cites (§ 94) Sk. *hita*>*hida* in the Kālsī, Shāh., and Māns. versions but *hita* in the Dhauli version. Now it is difficult to know why LUEDERS regards this as an eastern peculiarity when the words noted above show that the change of *t*>*d* is witnessed in the northern and north-western versions, but not in the eastern ones. Another instance, Sk. *toṣa* > *doṣa* appearing also in a northern version (Kālsī VI), we may set aside as LUEDERS takes it to be a 'Schreibfehler'. But we can certainly take into account the Mānsehrā form *yadra*, (Sk. *yātrā*), according to BUEHLER'S reading, or *ya*(*d*)*da*, according to HULTZSCH's reading, which also supports the view that the voicing was a non-eastern tendency.

But since LUEDERS believes that the change of *t*>*d* is an eastern characteristic he has some difficulty in accounting for the presence of *t* for *d* in such forms of the separate edict as *paṭipātayehaṁ*, *paṭipātayema*, etc., from Sk. *prati*√*pad*. He observes (p. 81), "Wichtiger ist noch. dass der Redāktor von Jau. Sep. in seinem Bestreben, die Hochsprache zu gebrauchen, in alle Formen von *paḍipādayati* ‚zukommen lassen, bewirken' (Pāli *paṭipādeti*, Sk. *pratipādayati*) das *d* fälschlich durch *t* ersetzt hat...." Actually the case seems to have been that since, as suggested above, the separate edict was originally composed in a non-eastern dialect it probably contained some other words changing *t*>*d*, and these the redactor rightly changed to *t*. But this misled him in doing the same about *paṭipātayehaṁ* etc., because he probably confused the forms of √*pad* with those of √*pat*.

As regards the change *kkh>ggh*, LUEDERS cites (§ 149) Sk. *śakṣyati* (future of √*śak*): Aś *caghati* or *caghaṁti* in the 4th PE and *caghatha* in the separate edicts. The Aśokan inscriptions show a base √*cak* besides √*sak* < Sk. *śak*. The future base from this stem would be √*cakṣya* which in the eastern dialect would appear as √*cakkha*. According to LUEDERS this has further become √*caggha* in the above instance as softening in his opinion is an eastern characteristic. But possibly the Aśokan evidence is not clear enough to conclude √*caggha* with the softening of *kh>gh* to be an eastern form. Its occurrence in the separate edicts makes it a doubtful case in this regard and suggests a possible case of non-eastern influence for softening. But its occurrence in the pillar edict IV, which has an eastern version, is a little difficult to explain. As I do not regard softening to be an eastern feature I would expect the pillar edict IV to show a base √*cakkha*, and not √*caggha*, if that has to be derived from √*cakṣya*– (=√*śakṣya*–). But just on the strength of this one instance I would not like to consider softening to be an eastern tendency. The explanation of the form has perhaps to be sought elsewhere. So far as Pāli *sagghasi*, mentioned by LUEDERS, is concerned, the reading is not absolutely certain and in the context the reading *agghasi* given by other manuscript suits equally well. And even though *sagghasi* be the original reading it can be regarded as a non-eastern form arising from eastern *sakkhasi*[1]. As regards Aśokan √*cagha* I may put forward for your consideration the suggestion that here perhaps we have a base √*cagha* of the present tense, and not √*caggha* of the future from √*cak* (√*śak*). This √*cagha* indicates that the old IE base from which it is derived had a voiced aspirate in it. It will thus be *√*kagh*[2] (or **kegh*) 'to be able, to help' as once suggested by ZUPITZA in *Die Germanischen Gutturale* (= Shriften Zur Germanischen Philologie. Achtes Heft, Berlin 1896) p. 104, (cited by WALDE-POKORNY 1. p. 333) instead of *√*kak*—(*kek*- ?). This IE *√*kagh* seems to have given two bases in old Aryan *√*śagh* and √*śak* and of these √*śak* occurs in the Aśokan inscriptions as √*saka* or √*caka* and *√*śagh* as √*cagha*. Aryan *√*śagh* is perhaps found also in Sk. *śagmá* 'strong or able' which is generally related to the other base √*śak*. If this interpretation is accepted √*cagha* of the Aśokan inscriptions would represent a case of old preservation and not of voicing of intervocal -*kh*-.

In support of his contention that the change *ṭṭ* > *ḍḍ* is an eastern tendency, LUEDERS cites (§ 152) from Aśoka Sk. *āmravartikā* > *aṁbā*-

1. Or it can be explained as coming from Sk. *saghnoti* 'to take upon one's self, etc.'
2. WACKERNAGEL, *Alt. Gr.* I.225 considers the palatal *ś* of √*śak* to be secondary. In that case the IE base would be *√*sagh*.

vaḍikyā in the seventh pillar edict at Toprā and the Queen's edict at Kosam. Now as noted by LUEDERS himself (p. 118) the eastern treatment of Sk. *rt* is *ṭ* and not *ḍ*, cf. *kaṭaviya* etc. in the Dhauli and Jaugaḍa major edicts. In my opinion -*vaḍikyā* is no exception to this general tendency since the form occurs in the north in the seventh PE of Toprā for which there are no eastern parallels. And as regards the Queen's edict, be it noted that Kosām is situated on the left bank of Jamnā, about 28 miles west by south of Allahabad, which can hardly be expected to give evidence for an eastern peculiarity unless corroborated by other clearly eastern evidence.

The same thing has to be said about the change *ṭṭh* > *ḍḍh* (§ 152) when LUEDERS cites Sk. *aṣṭakrośikāni* > *aḍhakosikyāni* and Sk. *niśliṣṭi* > *niṁsiḍhiyā* both in the seventh pillar edict at Toprā. The normal treatment in the east in similar cases is *ṣṭ* or *ṣṭh* > *ṭh*, cf. *seṭha* in the Dhauli major edict, *niṭhūliya* in the pillar edicts etc. As noted above the instances which occur only in the seventh pillar edict at Toprā should not be used as Aśokan evidence in support of a particular feature being eastern. If the same feature is not found in the major edicts at Dhauli and Jaugaḍa or in the other pillar edicts there is every reason for its being treated as non-eastern.

In view of the above examination of the Aśokan evidence it is difficult for me to agree with LUEDERS when he observes (§ 155)—"Überblickt man das gesamte Material, das uns die Aśoka- Inschriften und die literarischen Prakrits bieten, so scheint mir deutlich daraus hervorzugehen, dass die Erweichung des *ṭṭ*, *ṭṭh* zu *ḍḍ*, *ḍḍh* eine Erscheinung ist, die der Ostsprache angehört."

We may now take a couple of instances to show how his hypothesis regarding softening to be an eastern characteristic has led LUEDERS to support or suggest some far-fetched derivations. In §§ 159-165 he gives a very instructive Exkurs über *kasati, kaḍḍhati, kassati*. In Pāli we have the verbal base √*kaḍḍha*, besides √*kasa* (√*kaṁsa*) and √*kassa* which latter go back to Sk. √*kṛṣ* or √*karṣ*. Now about the origin of √*kaḍḍha*, WEBER naturally thought to connect it with the Sk. p.p.p. *kṛṣṭa*. But LUEDERS objects to this and observes (p. 125), "Die Bestimmung der Heimat von *kaḍḍhati* ist für die Entstehung der Formen von Bedeutung. *Kaḍḍhati* kann sich nicht aus *kṛṣṭa* weiter entwickelt haben, wie Weber, allerdings durch die vielfach im Prākrit auftretenden Schreibungen mit *ṭṭh* veranlasst, ZDMG. 28,375 annahm, da der Übergang von inlautendem *ṭṭh* in *ḍḍh* auf die östliche Sprache beschränkt ist. So gewinnt die Zurückführung von *kaḍḍh* auf ein vorindisches **kṛzd*, eine

Nebenform von *kṛṣ*, die Bloomfield JAOS. 41,465 vorgeschlagen hat, an Wahrscheinlichkeit."

In the article referred to above BLOOMFIELD notes a 'root-determinative' *d* in Aryan tongues in such bases as *īḍ* = *iṣ-d*, *pīḍ* = *piṣ-d*, etc. On this analogy he offers a suggestion, described as 'daring' by himself, that Pāli–Pkt. *kaḍḍh* may go back to **kṛṣ-d* > **kṛẓd*. But this seems impossible because the forms derivable from *kṛẓd* do not only not appear in Sanskrit or Avesta, but have no parallel in any other Indo-European language. (It is not necessary to discuss GEIGER'S suggestion (§ 130) to consider *kaḍḍhati* < **kardhati*, a side-form of *karṣati*).

LUEDERS' objection to the derivation of √*kaḍḍha* from *kṛṣṭa* is just his conviction that softening is an eastern characteristic. But as shown above this is not borne out by the Aśokan evidence, and hence there should be no objection to supporting WEBER'S suggestion noticed above. In the eastern language there seems to have arisen a verbal base √*kaṭṭha* (from Sk. *kṛṣṭa*), giving forms like *kaṭṭhati*. Now as regards the formation of middle Indic verbal bases from Sk. p.p.p. we may do well to refer to EDGERTON'S BHS Grammar 28.19 where he notes such forms as *buddhati, lagnati*, from *buddha, lagna*. Pāli *kaḍḍhati* then evidently goes back to this *kaṭṭhati*. That the eastern language had a form like *kaṭṭhati* is shown by the fact that the manuscripts of the BHS texts give *kaṭṭati* which obviously stands for *kaṭṭhati* with loss of aspiration. (On other grounds, which I cannot detail here, I regard the loss of aspiration as a non-eastern characteristic). About this *kaṭṭati* EDGERTON does not offer any explanation. But he could have as well included it under 28.19 where he gives *buddhati* etc.

The other interesting case is that of Sk. *vetana* 'wages, reward, etc.'. About this we read in the words of the Editor (p. 81, f.n. 1)— "Endlich nennt LUEDERS eine Stelle aus J. 402,8, wo heisst: *na paṇḍitā vedanam ādiyanti*, Dutoit : „Nicht wollen Geldeslohn die Weisen haben." Hier steht *vedanam* für *vetanam* ‚Lohn'." Thus from this remark it appears that in the opinion of LUEDERS Sk. *vetana* had become *vedana* in the eastern dialect from where it was borrowed in Pāli.

To my mind the case appears to have been otherwise. *Vetana* is a relatively late word. It was known to Pāṇini in the north-west who used it in his sūtra 4.4.12 *vetanādibhyo jīvati*. According to the Uṇādi III.150 it is to be derived from √*vī* (*gatyādau*) with the suffix *-tana*. KUIPER, *ZII* 8.263-266, has a similar explanation but he connects it with the Vedic root √*vī* 'zu gewinnen suchen'. (It is not necessary to discuss the suggestion of MONIER-WILLIAMS to derive it from √*vṛt*).

But *vetana* cannot contain the suffix *-tana* as this suffix is used for the formation of adjectives from adverbs, cf. *nūtana, sanātána*, etc. (WACK.—DEBR. *Alt. Gr.* II. 2. § 444). I am, therefore, inclined to equate *vetana* with Sk. *védana* 'wealth, possessions' from √*vid* 'to find, to obtain, to give, etc.' which is known since the Rgveda. This *védana* seems to have become *vetana* in some north-western dialect with the devoicing of inter-vocal stop, from where it was taken up again in the OIA and MIA languages. In the course of time *védana* also seems to have come to mean 'prize, reward, etc.'. For the semantic change from 'property' to 'reward' we may compare a similar change in the Germanic family from Gothic faihu (Sk. *paśu*) 'money, property' to Eng. fee. *Vedana* in Pāli then may represent the translation of an eastern middle-Indic *vetana* or it may be just the preservation of the old *védana* continued in some spoken dialect.

As regards the change $p > v$ I think LUEDERS (§§ 99-100) is right in regarding this to be an eastern characteristic. But in his articles on this subject he does not adduce the available Aśokan evidence, though small, in support of this view. For instance, among the minor rock edicts only the Sahasrām version in the east gives √*pāva* for Sk. *pra*-√*āp*, while the non-eastern versions of Rūp., Brahma., and Śiddā. give √*pāpa*. That the base √*pāva* had not thouroughly driven out from the east the other base √*pāpa* in the Aśokan days is shown by the fact that we get such forms as *pāpova* in the sixth Ararāj pillar edict and *pāpovā* in the corresponding Toprā version.

Apart from this, I wish to bring to your notice another explanation of a word dealt with by LUEDERS under Hyperpālismen (§§ 144-147) with regard to the change $p > v$. I am referring to Pāli *supāna* 'dog' (§ 146). LUEDERS considers that the strong form of Sk. *śvan* gave rise to a base *suvāna* in the eastern dialect which was wrongly translated into Pāli as *supāna* as the translator was aware of the fact that the eastern dialect changed $p > v$. Now such a misunderstanding seems unlikely in the case of a word for dog, and if the Pāli translator used *supāna* it means that that must have been the regular western correspondent for the eastern *suvāna*. This is quite likely since corresponding to Sk. *śvan* (< **kuon*) we have *span* (nom. sg. *spā*, acc. sg. *spānəm*) in the Avesta. This *span*, or a middle-Indic base from it *spāna*, probably survived even in India in some spoken dialect from which we can have the Pāli form *supāna*, just as we have *suvāna* from Sk. *śvan* or *śvāna* in the eastern dialect. The Gk. word *spáka* 'hundartig' (besides *kúon, kunós*) and the Russian word *sobáka* 'Hund' show that forms with *p* were current in other Indo-European languages besides Avesta. *Supāna* is thus an

instance not of hyperpālism but of a regular development from an archaic dialect form *spāna* agreeing with the Avesta.

I shall now take a couple of cases with regard to LUEDERS' observations on the nominal flexion. In §§ 188-195 LUEDERS has convincingly demonstrated the use of a special abl. sg. in *-aṁ* in the eastern language of the Buddhist canon. Recently De VREESE (*BSOS* 17.369-371, 1955) has expressed himself against the use of *-aṁ* as abl. sg. in old Jaina-Māhārāṣṭrī (cf. ALSDORF, *BSOS* 8.329 ff., 1936). But I do not consider that De VREESE has proved his case. The use of the acc. instead of the abl. with certain verbs in the Buddhist Hybrid Skt. does not disprove the argument of ALSDORF (De VREESE had evidently not seen LUEDERS' treatment when he wrote his article), and the interpretations put by De VREESE on the Pāli passages are far-fetched. I shall not enter here into the details of my belief that this abl. sg. *-aṁ* is perhaps not a regular development of *-āt* but is only a graphic representation of the term. *-ā*. I would, on the other hand, add one more instance showing the use of *-aṁ* as abl. sg. to those already cited by LUEDERS. This instance occurs in the Dh. 135 (cited by LUEDERS in § 140 under a different topic) which runs as—

yathā daṇḍena gopālo gāvo pāceti gocaraṁ/

evaṁ jarā ca maccu ca āyuṁ pācenti pāṇinaṁ//

Max MUELLER—"As a cowherd with his staff drives his cows into the stable, so do Age and Death drive the life of men." LUEDERS rightly objects to *gocara* being translated as "stable". He corrects it to 'Weide' but continues to regard *gocaraṁ* as acc. sg. To my mind, however, *gocaraṁ* cannot be acc.; context shows that it must be abl. In the second half of the stanza we are told about (Old) Age and Death driving back the life of men. Hence in order to understand the simile correctly we must interprete that in the first half of the stanza there is reference to the driving back of the cattle from the *gocara* and not to it. The first line, therefore, means—"Just as a cowherd with his stick drives away the cows *from the pasture*......".

In §§ 220-225 LUEDERS very ingeniously demonstrates the use of *-hi* as loc. pl. in the eastern language of the original canon. However, his interpretation of *akkhesu* in the Suttanipāta 659 (§ 221) as a misunderstood loc. pl. does not quite carry conviction. The stanza runs as—

appamatto ayaṁ kali/ yo akkhesu dhanaparājayo/ sabbassāpi sahāpi attanā/

ayam eva mahattaro kali/ yo sugatesu manaṁ padosaye//

According to LUEDERS the stanza means, "Das ist ein geringer Unglückswurf, wenn einer durch die Würfel Geld verliert, selbst die ganze Habe samt der eigenen Person. Das vielmehr ist ein grosser Unglückswurf, wenn einer gegen die Heiligen böse gedanken hegt." LUEDERS considers *akkhesu* as a misunderstood loc. pl., that is to say in his opinion the original canon had *akkhehi* as instr. pl., but since this could also be a form of the loc. pl., the Pāli translator wrongly gave it as *akkhesu*. Now in his critical analysis of the second quarter of the first line, LUEDERS has rightly seen that in the original canon we had two separate words *dhanaṁ palājaye* and that *palājaye* was a verb form. This has been happily confirmed by the Udānavarga version (8.4) which gives—*dhanaṁ parājayet*. LUEDERS further argues that the verb form *palājaye* of the original version was misunderstood by the Pāli translator as a nominal form in the nom. sg. and hence he changed *dhanaṁ* to *dhana* and joined the two together in a compound *dhanaparājayo*. To me it does not seem very likely that the Pāli translator could have made a mistake about the verb form if *dhanaṁ palājaye* stood separately in the version before him. The more likely explanation, therefore, seems to be that in the version before the Pāli translator *dhanaṁpalājaye* were read together and hence he mistook it to be a compound formed on the analogy of the more common *dhanaṁjayá* (cf. Vopadeva 26.60). But as this was an unusual formation for the Pāli translator he changed *dhanaṁpalājaye* to *dhanaparājayo*.

But whether *palājaye* is taken as a verb form or a noun form its use with loc. in such constructions as above seems to be quite idiomatic. One may compare here favourably similar uses in some of the NIA languages—'he lost money in horses, in cards, etc.' where one uses loc. and not instr. In the above stanza, therefore, *akkhehi* could be regarded as loc. pl. and hence rightly rendered by the Pāli translator by *akkhesu*. The Udānavarga translator, however, does not seem to have understood the idiom, and hence he interpreted *akkhehi* as instr. pl. and rendered it as *akṣeṇa*. The Pāli verse is to be translated as—"that is an insignificant loss (lit. the unlucky throw, *kali*) which is loss of money at gambling (lit. dice, *akkha*).... This indeed is a greater loss when one spoils one's mind against the holy persons."

III

Before I conclude let me refer to two significant events of the past two years which promise to give a great impetus to the linguistic studies in India—I mean the organising of a series of schools of linguistics at the Deccan College, and the strengthening of the Linguistic Society of India. Thanks to the initiative of the Director and the Council of Management of the Deccan College Research Institute on the one hand,

and the Rockefeller Foundation on the other a series of three post-graduate Schools of Linguistics was organised in 1954-55. I need not go into the details of the working of these Schools; their success can be seen from the great interest they evoked at each session. Perhaps for the first time in the recent history of University education in India it was possible for the students from all over India to come together and receive instruction from a Faculty constituted by drawing personnel from the Indian as well as foreign Universities. With the growing importance attached to the structural studies of our languages in a free India, the need for imparting scientific instruction in linguistics has been felt, and the holding of short-term schools has partly sought to satisfy this need. The attempt is limited, but it definitely shows steady awakening. However, what is really necessary is the starting of a full-time course in linguistics at all important Universities. This has been often suggested, but for one reason or the other not executed. It is significant, therefore, that our host University here has established a Silver Jubilee Chair in Dravidian Philology from non-recurring grant received from the Union Government, as a beginning in this direction. Let us hope that with the growing country-wide interest evinced in the subject and the proposed establishment of the Linguistic Survey of India by the Central Government, the other Universities will take adequate steps to play their part at an early date. The great task of taking up the descriptive studies of various dialects is ahead of us and this will require a band of field-workers well grounded in the tool courses of linguistics.

The second point to which I would like to refer is with regard to the strengthening of the Linguistic Society of India. I have great pleasure in announcing that the membership of the Society has recently increased from less than fifty to about three hundred. As regards the publication of the official Bulletin of the Society in future it is proposed to bring out the Volumes of *Indian Linguistics* regularly twice a year towards ultimately converting it into a quartery. Since last year an attempt is being made to hold the meetings of the Linguistic Society annually. In this regard I would request the Universities and Research Institutes to give recognition to this body for the purposes of sending delegates to its meetings and for strengthening its effective membership. Then again it is proposed that at different places where there are ten or more local members, they might form a regional or local circle and hold meetings at least once in two months for reading papers, discussing problems, or even undertaking some organised effort in dialect studies. The reports of these activities of the circles can be published in the Volumes of *Indian Linguistics*, and even some small monographs can be separately brought out. All such activities will not only help in keeping up the interest of

the members, but also in raising the Society in the eyes of the University authorities to give it due recognition.

Let me now conclude with a couple of quotations. The late Dr. SUKTHANKAR said in his sectional President's address at Tirupati 15 years ago,

> "It is the debt to the ṛṣis, which is difficult to discharge and which usually remains unpaid. Let us, however, follow the mandate of the scriptures and let us not forget our debt to the ṛṣis, even if it has been neglected in the past. Let us not forget our debt to the Maharṣi Pāṇini, who has made the name of our country resound in the halls of the academies of the world. Let us endeavour by our assiduous and fruitful study to keep bright the fair name of that illustrious Muni of imperishable fame, Pāṇini!"

And as recently as 17th October 1955, while requesting Shri Balasaheb KHER to inaugurate the Autumn School of Linguistics, Dr. KATRE repeated,

> "With your blessings, we are confident that the beginning made here will prove itself fruitful and produce not unworthy successors to the great Acharyas and Rishis who established the science of Linguistics for the first time in India. May these efforts succeed in raising a Pāṇini or a Patañjali in the next few generations to uphold and sustain the position of India as a leading country for the scientific study of languages!"

THE VEDIC REMINISCENCES OF A CHALDEAN SUN-HYMN

By

R. G. Harshe

Since Tilak wrote his paper[1] on *"Chaldean and Indian Vedas"*, correlating a few Vedic words and ideas[2] with their Chaldean counterparts and *vice versa*, no Indian scholar of repute has seriously applied himself to the comparative study of the vast material that has been unearthed in the form of cuneiform tablets in Western Asiatic countries like the Asia Minor, Syria and Mesopotamia, etc., through the indefatiguable labours of the European and American scholars. It is to be regretted that when India is so vitally connected with these ancient lands, she should be conspicuously absent in all these efforts ! It is now high time that an Assyriological Institute is founded by the Government of India where these and cognate studies will be carried on by a small band of scholars in order to unravel the ancient past so well-preserved in Vedic and Post-Vedic literature of India.

It is highly surprising that a Chaldean Sun-Hymn[3] should contain not only Vedic words but the self-same ideas with which we are familiar in our Saura Sūktas or parts of the Rgvedic hymns, addressed to some form of the Sun, such as Pūṣan, Mitra, Savitṛ, Āditya, etc. It would, therefore, be interesting to examine very closely the contents of the hymn inscribed on the cuneiform tablet No. K. 256, preserved in the British Museum and extensively dealt with by the French scholar M. François Lenormant.[4] The text is mutilated at several places and about six lines are altogether missing in a hymn of 35 lines.

1. 'Commemorative Essays presented to Sir R. G. Bhandarkar', 1917, pp. 29-42.
2. About 14 words, namely, *manā, sindhu, Taimāt, Āligī, Viligī, urugūlā, tābuva, kimīdin, yahve, Apsu, uru, sina, sinīvālī, tur-purattu* [Purattu, with several variant forms, is, in fact, the name of the Euphrates—RGH, See K.C. p. 2159], *itu*—and magical rites and cosmogonic and cosmographic ideas, etc.
3. Journal Asiatique, Septième Série, Tome XII, No. 3, Octobre-Décembre, 1878, p. 378 ff.
4. "Hymne au Soleil, un Texte Primitif Accadien, avec version Assyrienne, traduit et commenté par M. Francois Lenormant"—J.A. Vol. XII, 1778, pp. 378-434 and Vol. XIII 1879, pp. 5-98.

The Accadian Text, Translation and Notes.[5]

I.	ENI	GAL	ANA-SÂ	AZAGGATA
	(Lord)	(great)	(of the sky+middle)	(brilliant+of the)
		UDDUZU	NE	
		(-in -rising+ thy)	(the -these)	

Translation : Great Lord of the middle (region) of the brilliant sky, at thy risings.

Notes : ENI = Lord. The conventional form is ENU or probably ENÜ. In Sanskrit *ina* = 'A lord, a master, a king, the sun',[6] and *inu* is the name of a Gandharva– a semi-divine being. It is a Vedic word very frequently used in connection with Indra,[7] Pūṣan,[8] Agni,[9] etc. Sāyaṇa, in his Commentary, interprets the word *ina* as *īśvara*[10] = lord. This similarity is strikingly significant. Besides, there is another Vedic word *enī* which has been translated by Sāyaṇa as *"śvetā dīptiḥ"* (white splendour)[11] which bespeaks of the halo of light round the faces of gods and saints.

GAL = great. According to M. Lenormant,[12] it is found variously written as GU-LA, GALLU and GULÛ. If we apply the Sanskrit rule[13] of the interchangeability of *r* and *l* in this case, we have the Skr. word *guru* from the last variant in Accadian which also means 'great'.

In ANA-SÂ = 'the middle of the sky', if the word indicative of the sky ANA is supposed to have come from the Skr. root *an* 'to breathe, gasp, move, go',[14] ANA may also mean 'that which breathes or moves' and it may be applicable to the sky also which is the original abode of breath (wind) and which appears to move.

In the compound word UDDUZU, the members are UT + DU + ZU; and UT = UTU = 'the sun'; DU = 'going, coming out, rising' and ZU = 'thy'. Literally, UDDU would mean "the sun-going, the sun-

5. The Accadian text is copied from Lenormant and his Commentaire is consulted throughout wherever necessary. The English translation closely follows his French version in the original, as far as possible.
6. Monier Williams (MW.)—Dictionary: Sanskrit-English, 1872, p. 139.
7. 'kenipānāmino vṛdhe' RV. X. 44.4.
8. 'ino vājānāṁ patirinaḥ puṣṭīnāṁ'—RV. X. 10.26-27.
9. 'ino rājannaratiḥ samiddho'—RV. X. 3.1.
10. 'inaḥ īśvaraḥ'—RV. X. 3.1.
11. RV. X. 12.3; 75.7.
12. J.A., Vol. XII, p. 385.
13. 'ralayorabhedaḥ'.
14. MW. p. 24.

rising", (in Skr. also a compound word = *sūryodaya*). In ordinary parlance also the word UDDU has come to mean[15] simply- 'going out, coming out', etc. not restricted to the rising or coming out of the planets or stars.

In Skr. we have the usual root *ud + i* or *ud + ā + i* - 'to rise' but there is also the root *du* (*davati*) - 'to go, to move',[16] which can be connected with the Accadian DU. NE or rather ENE, shortened into NE, is a plural suffix[17] which need not be translated. But if it is taken as a demonstrative, it has an interesting parallel in Sanskrit in the optional form *ene* of *ete*, masc. nom. plu. of *etad* = 'this'.

2. TAŚŚAK (Hero)	DUN (valiant)	UTU (the sun)	ANA-SÂ (of the sky+middle)
AZAGGATA (brilliant-of the)	UDDUZU (in risings+thy)	NE (the)	

Translation: Valiant Hero, O Sun, of the middle region of the brilliant sky, at thy risings.....

Notes: TAŚŚAK = TAŚ (to be hostile) + SAK (head, great, chief). Not being able to render a satisfactory explanation of the compound word, Lenormant wants to connect it with the adverbial form TAŚBI, which means 'actively, with haste', and then render the meaning of the word TAŚŚAK as "active chief". If, on the contrary, we take the Skr. words *tas* and *śak* we have a very happy meaning for this expression, namely, "one who is powerful (*śak*) enough to throw down (*tas*)[18] his enemies".

DUN = valiant. The Assyrian equivalent quoted by Lenormant[19] does not further specify the meaning but, according to Langdon,[20] DUN, in Sumerian, means "to protect" and perhaps in the present case it may mean "a protector." If, however, the word is connected with the Skr, root *du* of the 5th Conjugation, it means" to burn, to consume with fire, to cause pain by internal heat or fever, to cause sorrow or distress,"[21] and when applied to the Mesopotamian Sun, the epithet is true in every res-

15. For grammatical intricacies, etc., see M. Lenormant—pp. 387-388.
16. MW. p. 418.
17. *A Sumerian Grammar and Chrestomathy*—By Stephen Langdon (1911), pp. 82 and 105-106.
18. MW. p. 367.
19. *idlu*—'valiant, noble, master'; 'one of the qualifications of the Sun-god'.—p. 390, J.A. XII.
20. Langdon, p. 211.
21. MW. p. 418.

pect. Apart from the idea of causing affliction or sorrow to the enemies, the heroes often indulged in burning their cities. The Sanskrit meaning is satisfactory on both these grounds.

UTU = the Sun. In Skr., the Vedic word *ūti* = 'protection',[22] must probably have come from the root *ū* 'to preserve,'[23] the idea which is always associated with the Sun, and the word UTU can be connected with this root. There is another word *ota*, derived from *ve* 'to weave' and this root has a secondary meaning 'to cover'[24] which can be connected with the Sun covering the earth by means of his rays.

3. ŚIGAR	ANA	AZAGGATA	DU
(The bolts)	(of the heaven)	(brilliant+in)	(the door)
GAR	DU	ANA	......ZU	NE
(which)	(opens)	(the heaven)	(to ....)	(the)

Translation: In the bolts of the brilliant heaven, in the door that opens the heaven, at thy.......

Notes: In the compound word ŚIGAR, the first member ŚIG is indicative of 'the wood'[25] and AR can be equated with the Skr. word *ara*—'the spoke of a wheel,'[26] the entire word meaning "a spoke-like wooden bolt or bar, used as an additional protection, after closing the door—a device which is very common in India especially in the case of old-type houses.

DU = door. In Vedic Skr., we have the word *dur* = 'door'[27] and *r* is changed to visarga before the hard consonants. In course of time, it must have been dropped in Accadian. For the second DU which means 'to open,' there is a Skr. equivalent *du*—'to go, to move,'[28] which goes well with the to and fro movement of the door.

4. SUDIS (?)	ANA	AZAGGATA.........
(The bar of the door)	(of the heaven)	(brilliant+in)
..........ZU	NE	
(thy)	(the)	

Translation: In the bar of the door of the brilliant heaven........

22. A very common word. See, RV. 1.63.6: Sāyaṇa: '*iyam ūtiḥ*....idam rakṣaṇam'.
23. MW. regards it (p. 176) as a noun, meaning "preserver", with a question mark, and derives it from the root *av*—'to protect', but evidently this seems to be an error. For similar noun-formations cf. bhūti, stuti, prīti, etc. From the past participle base *ūta* we can have a noun in *ṛ*, namely, "*otṛ*"=protector.
24. MW. p. 692.
25. Lenormant, p. 391.
26. 'rathānāṁ na ye arāḥ'—RV. X. 78.4; MW. p. 80.
27. Sāyaṇa: 'duraḥ yajñadvārāṇi'—RV. VII. 2.5; 'duraḥ dvārāṇi'—Sāyaṇa: RV. VII. 9.2, etc.
28. MW. p. 418.

5. IQ (The door) GAL (great) ANA (of the heaven) AZAGGATA (brilliant+in)
IQ—SABURÂZU (in door + opening + thy) NE (the)

Translation: In the great door of the brilliant heaven when thou openest it.

Notes: IQ at the beginning does not exactly mean a 'door,' but 'a door-post.' In the present context and in its Assyrian version it means a door by extension of meaning. IQ is a verbal root which means firstly 'to raise' and then 'to open,' indicating there by a certain movement of raising after shutting the door[29] and it can very well be connected with the Skr. root *ikh*—'to go, to move,'[30] as in the case of DU above.

6. ...... MAX (Very high) ANA (of the sky) AZAGGATA (brilliant + in)
PAPXALLAZU (in rapid movements + thy) NE (the)

Translation: In the highest (summits) of the bright sky, at the time of thy rapid advance. ......

Notes: The word MAX is variously interpreted as 'numerous' expressing the notion of 'greatness of the highest order,' of being a 'lord, magnate or chief.' According to Lenormant,[31] it is a word 'purely of Accadian origin' and has passed into the language of the Semitic population in which "*maḫḫu*" means 'very high, very great, very numerous.' In the sense of multitude or collection we have a Skr. root *makṣ* or *mrakṣ*.[32]

In PAPXALLA we can recognise the Skr. root *kṣal* or *kṣar* 'to flow away, to stream forth, to run.'[33]

7. ...... XULLIES (Joyfully) ....NE SAMURADANSARSAR (flock together around thee)

Translation: (The celestial Archangels) in joy and respect flock round thee.

29. M. Lenormant has discussed at length the various usages of the word and its equivalents, pp. 395-402.
30. MW. p. 138.
31. P. 403.
32. MW. pp. 727 and 800. *mrakṣ* is a Vedic root: RV. VIII. 61.10 but here Sāyaṇa interprets it differently.
33. MW. pp. 265-266.

Notes: The word XUL has been interpreted[34] to mean "joy" and XULLIES is an adverb which means "joyfully." In the Syllabary the word XUL has been equated with the Assyrian word *ḫidutuv* = 'joy'. This word reminds us of the Vedic root *khud*—'to sport wantonly or amorously.'[35] For its Vedic use see RV. X.101.12 where Sāyaṇa interprets the word "khudata" as *'khurdata krīḍayata.'*

There is another Skr. word which is the same as the Accadian word SARSAR. According to Lenormant,[36] SAR = 'to push forward' (pousser en avant), in transitive or intransitive sense, according to the context, and SARSAR is, according to him, a "dérivé duplicatif," which means "to approach, to draw near, to advance.' We have in Sanskrit not only the root *sṛ*—'to move' but its reduplicative form *'sarsar'* also.[37]

8. NIN -MENNABI ULLIES
(The Lady+(of) Crown+the) (in festival)
SAMURADABLAGIES
(conduct thee together)

Translation: (The servants of) the Lady with the Crown[38] carry you in festivity (joyously).

Notes: NIN is the word indicative of the goddess. The BI in MENNABI is a termination and the form MENNA, according to Lenormant,[39] is a phonetic corruption and contraction for AMIENNA. AMIA = crown and AMIENNA = the raised crown to be used by the gods. It would be worthwhile to consider here the Vedic word *amaḥ* which has been interpreted by Sāyaṇa as *'sarvatogamanaśīlaṁ balaṁ'* (RV. VIII.93.14) and it goes well with the gods. The derivative *amita* = "glitter, splendour, a splendid shape,"[40] should also be taken into account. We have got a special group of gods called the *"amitābhadevagaṇa"* and it may be that the glittering of the jewels of the crown is responsible for the word *"deva"* (shining) applied to the gods, having a halo of light due to the rays of the gems of the crown shooting in all directions.

34. J.A. XII, p. 405.
35. MW. p. 276.
36. J.A., p. 406.
37. Vide MW. p. 1133—Intens. *sarsarti*; Vedic-*sarsṛte*.
38. In the Assyrian version of this Hymn, the meaning given is different from the original Accadian text which mentions only a goddess (Lady with the Crown). But in the Assyrian version the goddess is named as *Belit ili* (=Banit ili—"génératrice des dieux") i.e. *Aditi*, the Mother of Gods, according to the Indian tradition, p. 410.
39. J.A. XII, p. 411.
40. MW., p. 74.

The word ULLIES is an adverb in Accadian from ULU, UL, interpreted in Assyrian by the word *el-ṣi-is* which comes from the two words *ullu* and *ulṣu* meaning "feast, rejoicing." *ulṣu* particularly gives us the Assyrian form *elṣis* = 'in festival'. The most common word in Sanskrit for festival is *utsava* (from *ud* + *su*) but we have another Sautra root *ul* 'to burn' which is not given in the *dhātupātha* probably having been rendered obsolete in Pāṇini's time but which may have a metaphorical sense of the root *ullas* which more directly means 'to dance, to sport, to divert, as also to shine, to flash, etc.'[41]

9. ..... XILI (the joy) SÂZUTA (of heart + thy + in) KÛVA (peacefully)
UDDA (the days) SARADANGUB (he fixes for thee)

Translation: The.... for the joy of thy heart peacefully fixes the days for thee.

Notes: The word KÛVA has been translated by the word 'peacefully, by way of agreement.' If it could be connected with the Vedic word "*kuvit*" (RV. VI.42.4), it may mean, according to Sāyaṇa, *bahuśaḥ*— 'generally, for the most part,' which in the present case would perhaps be more appropriate.

UD = day and UDDA is the prolongation of UD.

10. ... KU (The crowd) SAR GALLAGE (greatly) LABBAR (act of looking)
INNABÂKENE (they+it+make)

Translation: The crowds greedily gaze (look, contemplate) on thee.

Notes: GALLAGE is derived from GAL = 'great' but in Skr. we have, the root *gal*—'to swallow' which brings out the sense: 'greedily', literally, 'swallowing with the eyes.' With reference to LABBAR and INNABÂKENE, Lenormant depends solely upon the Assyrian version for interpretation,[42] not having found their usages elsewhere in Accadian. If LAB in LABBAR has anything to do with *lab*, the lost cognate of the Skr. root *laṁb*—'to rest on, hang upon,' it will accord with the context here. Similarly, he recognises the verb ÂK—'to do,' in the latter expression but one may not be sure whether it is the same as the Skr. *ākan*—'to endeavour to obtain.'[43]

41. MW., p. 175.
42. J.A., XII., p. 428.
43. MW., p. 110.

11. ..... SAMURADABLAGIES

Translation: (The Spirits of the Sky and the Earth) conduct thee together.

12. .... GŪAS	BAR	SIBARRI	EN
(In ordaining)	(decision)	(he decides for them)	(certainly)

Notes: GŪAS is an adverb,[44] regularly formed from the substantive GŪ = 'word, order,' and curiously enough, we have a Vedic root[45] *gu*— 'to speak articulately, to proclaim.'[46] The Assyrian equivalent of BAR is *paraśu* which is the same as *parśu* or *paraśu* in Sanskrit = 'an axe, hatchet,' used here in a metaphorical sense signifying 'decision.'

13. ... INE	MINIBABRI	EN
(Favour)	(he grants to him)	(certainly)

Translation: He accords to them his favour.

13. .... GE	BADIBBI	EN
	(He takes)	(certainly)

Translation: He takes......

Note: The Accadian radical DIB—'to take, to catch hold of' can be connected with the Skr. root *div*—'to gamble'[47] in which the dices are caught hold of.

14......... ŚI	BANIBŚIDIE
	(He directs him)

Translation: He directs him....

Note: The word ŚI–DI has been translated[48] as: 'to direct, to govern, to take care, to cure (disease).' The Skr. root *sidh*—'to ward off, to restrain, to ordain, to instruct, to turn out well or auspiciously,'[49] may be taken into consideration here.

(The next six lines are so mutilated that no sense can be made out or any isolated word brought forth.)

44. J.A., XII., p. 430.
45. See Sāyaṇa on RV. I. 61.14; V. 64.2 (*joguve*—'*sarvatra śabdāpayāmi*'. This verb occurs in the reduplicated forms in the references given.
46. MW., p. 290.
47. MW., p. 413.
48. J.A., XIII, 1879, p. 6.
49. MW., p. 1114.

21.	ENE	MAE	MUNSING	EN
	(The Lord)	(me)	(sent me)	(indeed)

Translation: The lord, as for me, has sent me.

Notes: From the glosses quoted by G. Smith,[50] it can be established that the pronoun MAE sometimes has the value of MA and Lenormant, in adopting it, gives MAE as the form of the 2nd per. sing of the Personal pronoun I. One would immediately be reminded of the 2nd per. sing. forms *mām, mā* of the personal pronoun *asmad* in Skr. The dative and genitive singulars of the same are *mahyam, me* and *mama, me* respectively which may also be considered here though the declension of the Accadian and the Sanskrit personal pronouns differs in many respects. The irregular forms in Sanskrit declensions and conjugations deserve a deeper investigation and their comparison with the forms obtaining in the ancient-most languages would perhaps throw an additional light on their origin and formation.

In MUNSINGA, GA is the verb[51] which means 'to put further away, to remove, to transport, to render, to bring back, to restore, to place, to come back,' etc. In Sanskrit also we have the Vedic root *gā*[52] which means 'to go, to go towards, to come, to approach, to obtain,[53] etc. The shortened form *ga* of *gam*, at the end of the compounds, has the meaning of 'going, moving, staying, abiding in.' These come very near to the Accadian GA.

22.	ENI	GAL	MUL-KÎGE	MAE	MUNSINGA	EN
	(The Lord)	(great)	(EA)	(me)	(sent me)	(indeed)

Translation: The great Lord EA, as for me, has sent me, indeed.

Notes: MUL-KÎGE or MULKÎ—'The Lord of the Earth,' is the designation of EA who may be identified with the Vedic Varuṇa who is addressed as *Asura*[54] and *samrāṭ*,[55] 'paramount sovereign' or *rājan* 'king', at several places in the RV.

50. Phon. Val. 102.
51. J.A. XIII, p. 10.
52. Vide the different forms '*gāt*'—RV. X. 5.6; *gāta*—X. 19.1; *gātana*—V. 55.9; etc. *gam*—is also a Vedic root with *gamaḥ*—X. 16.14; *gamat*—IV. 55.10; *gamathaḥ*—IV. 43.4; *gamanti*—VII. 34.20, etc., as the forms used.
53. MW. p. 287.
54. RV. II. 28.7; I. 24.14, etc.
55. RV. II. 28.6; V. 85.1, etc.

23. UAGUBBABI (And + fix + him) GÛBI (order + his) AZUAB (inform + him) GÛAS (by ordering)
BARBI (decision + his) BARRABI (decide for him)

Translation: Fix up what concerns him, inform him of the order concerning him, fix up the decision which touches him.

Notes: UA has been translated here by Lenormant as "and" but the word for "and," in Accadian, is "Û"[56] or "U".[57] In Sanskrit *u* is 'an enclitic copula used frequently in the Vedas, and in certain contexts also means "and, also, further."[58] *uta* is also used in the sense of "and."[59]

In GÛBI the verb GÛ has the sense: 'to speak, to tell, to command' and we have also in Sanskrit the root *gu*—'to speak articulately, to proclaim'.[60] Similarly, in AZUAB, the root AZU—'to teach, to inform' from the radical ZU—'to know, to understand,' can be correlated with the Skr. root *adhi + i*—'to know, to learn, to study,' or the root *abhyas* (abhi + as) —'to study, to learn by heart.'

24. ZAE (Thou) ALDUNNAS (while going) ŚAKMIGA (the race of men) ŚI
BANIBŚIDIE (he directs it)

Translation: Thou, in thy march, direct the race of men.

Notes: In the word ALDUNNAS, the verb DU or DUN means 'to go'. Curiously enough, we have in Skr. the verb *dū*—'to go, to move and *dūna* = 'gone, going, moving.'[61] The expression ŚAK-MIG literally means, according to its Assyrian version, "those who have a black head = men = human race !"

25. SERZI (A ray) ŚILIMA (of peace) UAGARRAB (and + make = to him)
GARGIG (GA) BI (suffering+his) XABANIBŚIDIE (in order that + it + him + cures)

Translation: Make a ray of peace shine on him and let it cure his suffering.

56. *'Grammaire Accadienne*-par G. Ryckmans, p. 94; also Paul Naster—*Chrestomathie Accadienne*, p. 81.
57. René Labat—*'Manuel d'Épigraphie Accadienne'*, p. 290.
58. MW. p. 144.
59. For instance, RV. I. 1.2.
60. MW. p. 290.
61. MW. p. 418.

Notes: SERZI = 'ray,' has its equivalent in Skr. in the form of *sarjū* which means 'lightning' or better still of *sūrya* which, according to Vopadeva is derived from the root *sṛ* to go, to run, to proceed, to flow or from *sṛj*—'to emit, to shed, to throw,' which is also connected with the root *sṛ*.[62]

ŚILIMA is a loan-word from the Semitic Assyrian but one wonders whether it cannot be connected with the Skr. *śīl*—'to meditate, to serve, to act, to engage in, to practise repeatedly, to visit', etc.[63]

In UAGARRAB, the verb GAR—'to do, to make', can very well be correlated to *kṛ*—'to do, to make,' as k and g are interchangeable in Accadian.

The meaning of the word GARGIG is given as "physical pain or suffering"[64] and so far as GAR is concerned, it may be the same as *gara* in Skr. which also means 'sickness, disease, poison', etc.[65]

26.	MULU (The man)	DÙ (son)	DINGIRANA (of god + his)	DUNALUM? (the omission)
	NAMTAGG (the transgression)		ANKINKIN (he has laid down)	

Translation: The man, son of God, has laid down before thee his shortcomings and his transgressions.

Notes: To all appearances, 'the word DINGIR could be connected with the Sanskrit root *daṅgh*—'to protect.'[66] As for DUNALUM, the sense of omission can be had from the Skr. *dūna*—'gone,' from *du*—'to go, to move'.[67]

NAMTAG is a composite word: NAM + TAG. Lenormant records the meaning of NAM = 'to deviate, to turn away from the right path'.[68] Our Skr. verb *nam* does mean 'to turn away from'[69] and it may be applicable here. Similarly, the vedic root *tak*—'to fly, rush, pounce upon, laugh at, deride', etc.[70] is comparable to TAG—'to turn, to twist.'

62. MW. pp. 1094, 1132-1134.
63. MW. p. 1011.
64. J.A. XIII, p. 30.
65. MW. p. 284.
66. MW. p. 398.
67. MW. p. 418.
68. J.A. XIII, p. 37.
69. MW. p. 469.
70. MW. p. 357.

27. QAT-ARIK?BI (His hands and feet) GIG (sorrow) BANAKES (they + to him + make)
GIG(GA)BI (sorrowfully) TURA (the malady) BANA (pollutes)

Translation: His feet and hands make him suffer painfully; the malady stains him.

Notes: The word TURA (disease) is definitely related to the Vedic Skr. word *tura*—'hurt, wounded'.[71] The most common word *ātura*—'suffering, diseased,'[72] as compared with Accadian, must be explained as *ā* = 'full of' and *tura* = 'disease.'

28. UTU (Sun) GAR (to the action) QAT-GALLAMU (with hand+raising+mine)
GANIMSILAL (that -thou- lendest attention)

Translation: (Oh) Sun, at the raising of my hands, pay attention.

Notes: The word QAT, as has been shown by Lenormant,[73] is itself a loan-word in Accadian from the Ougro–Finnish group of languages and curiously enough it has been preserved in Marathi as a measurement of the fore-arm while measuring cloth for old-fashioned blouses, namely '*kaṭakī khaṇa*.[74]

29. GARBI (Food+his) KUA (eats) ŚIGISSE ŚIGISSE (the victims) RANA (accept)
DINGIRA (the god) GANA (—at—hand + his) MUNGARRAB (make it)

Translation: Eat his food, receive his victim, send forth his god (for support) at his hand !

Notes: GAR = 'thing, substance,' used in the sense of food,[75] can very well be connected with the Skr. root *gṝ*—'to swallow,' and by extension of meaning: 'a thing swallowed.' Its Assyrian rendering *'akalu'*, can also

71. MW. p. 379.
72. MW. p. 117.
73. J.A. XIII, p. 45.
74. See the article on "Sumero-Marathi Correspondences" by R. G. Harshe in the *Bulletin, Deccan College Research Institute*, Poona, XIV, I. pp. 16-32, in which about 120 words from Marathi have been traced to Sumerian, Accadian and Assyrian vocabularies.
75. J.A. XIII, p. 64.

be connected with the Skr. root *ākal*—'to lay hold of, to throw,' indicating thereby a different action of eating. The Accadian word for 'eating' is KU which reminds us of the word *kavala*—'a mouthful' in Skr. and MW. suggests[76] its derivation from '*ku*' which, however, in Sanskrit, means 'to sound'. It may be taken to indicate yet another action of eating but it goes well with the Accadian KA—meaning 'mouth' as it is the principal sound organ.

ŚIGISSE = victim. Its Assyrian equivalent *niqu*, in an expression '*niqu naqu*', has been interpreted as 'to sacrifice a victim' and in this connection the Vedic root *śi*—'to sharpen'[77] may have some bearing on the word ŚIGISSE.

As for RANA, Lenormant has discussed at length[78] its uses and those of the Assyrian equivalents. According to him, RANA can be regarded as the imperative of the verb RAN or RA—'to take, to receive, to accept', etc. It may be pointed out that the Vedic root *rā* means 'to grant, to give, to surrender' and the form *rarana*—'giving, bountiful,'[80] comes very near to RANA.

30.	DUGGAZUTA (Order+thy+by)	DUNALUMBI (short-coming+his)	GANGABGAB (that–thou–renderest absolved)
	NAMTAGGABI (transgression+this)	GANZIZI (that–thou– removest)	

Translation: By the order render absolved his short-coming! Efface his transgression.

Notes: In the word GANZIZI, the verb ZI = 'to remove, to take off or pull out by force,' has a reduplicated intensive and factitive form ZIZI which would mean 'remove the fault, set free.' This can be correlated to the Skr. root *ji*[81] or *jyā*[82] having a Vedic form '*jijyāsataḥ*' and interpreted by Sāyaṇa as '*vayohānimicchataḥ*' in RV.X.152.5, thus bringing out the sense of loss or *hāni*.

76. P. 214.
77. RV. VII. 104.20: "*śiśite*=*tikṣṇīkaroti*: Sāyaṇa". In the verse 104.I, *śiśitam* is used in the sense of *tanūkuruta*, which by the context may even mean 'to reduce in number' or 'to cut up to pieces'.
78. J.A. XIII, pp. 66-72.
79. Several derivatives of *rā*. Ex. RV. VII. 67.7, *rātaḥ*=*dattaḥ*.
80. Sāyaṇa usually connects the form *rarāṇa* with *ram* but in RV. IV. 1.5, he explains: 'yadvā—rāteḥ yaṅgluki vyatyayena kanac'.
81. MW. p. 346—'to expel from'; 'to overcome' (disease).
82. MW. p. 352—'to deprive of (property)'.

31. NAMXALBI XABANBAR
(The misfortune + his) (that + he + it + turns for good)
TURANIKU XABANTILI EN
(disease + his + for) (that + he + it + should give back life) (indeed)

Translation: (Wish) that his misfortune turns into a blessing so that he would come back to life again (being free) from his disease.

Notes: In NAMXAL, the word NAM = 'destiny, condition.' In Skr. *nam* means 'bending down, submitting or subjecting oneself to'—here, to the unseen power of Fate. XAL, according to Delitzch, means fundamentally 'to go quickly, hasten, precipitate' and par extension 'to attack, to strike.' I would like to connect this with the Skr. root *skhad, kṣad* or *khad*—'to cut to pieces, to harass, to fatigue, to exhaust, to strike, to defeat,' rather than with *kṣal* or *khal*—'to flow, to slip, to move.' The whole expression would mean to suit the context here: "the destiny of being harassed, struck or consumed."

32. LUGALBI GANENTILA
(King = the) (that -thou—reanimatest to life)

Translation: Give back life to the King !

Notes: The formation of the word LUGAL is LU + GAL = man + great. Lenormant gives[83] the etymology of LU from MULU > VULU > ULU > LU. In MW. we find, under *mūla*,[84] the recorded meaning: "an aboriginal native or inhabitant" and *mūlu* must have been the generalised form for man in olden days. It, however, requires further investigation before a positive statement can be made.

33. ENE UDDA ABTILA NAMMAXZU
(Then) (the day) (that he shall revive) (sublimity + thy)
GANIBBI
(that it envelopes)

Translation: Then, how I wish that the day on which he will be restored to life again, thy sublimity envelopes him (with its protection) !

34. LUGALBI KÂTARZU GANENŜILE
(King + the) (submits + to thee) (that-thou + him +direct).

Translation: Direct the king who has bowed down before thee.

Notes: In KÂTARZU, KÂTAR means prostrating with face downwards (KA—'mouth' and TAR—'to place, to put').[85] The word TAR is evi-

83. J.A. XIII, p. 80.
84. P. 788.
85. J.A. XIII, p. 89.

dently related to the Skr. root *tṛ* but the above meaning of TAR—'to put, to place' is not found recorded in MW,[86] unless we take 'to pervade' as nearer to it. The above sense can however be inferred from *áva+tṛ* = 'to come down, to descend.'

In GANENŚILE, the root ŚIL or ŚILA means 'to dominate, to govern, to direct.' The Skr. root *śil* means 'to glean, to gather' and if it is connected with kingship, it would mean gathering or collecting of taxes, i.e. one-sixth of the produce according to the ancient Indian Law. The idea contained in the word ŚIL can be brought out by the Skr. root *śīl*– 'to meditate, to serve, to act.'

35.	UA	MAE	ERIZU	GATARZU
	(And)	(me)	(servant + thy)	(submitted+to thee)
	GANENŚILE			
	(let thou direct him)			

Translation: And I, the enchanter, thy humble servant, direct me.

Notes: The word omitted is supposed to be that of a favourable magician called near the bed-side of the sick to help him by chanting the medical formula addressed to the Sun. Its Assyrian equivalent is *śiptu*, *śipat* which comes closer to the Skr. *śap*—'to conjure, to swear, to execrate'.

In ERIZU, the word ERI is contracted from ERIM, meaning 'servant' and in Sanskrit we have the root *er* (*ā–ir*) = 'to go to or into'. The word *arya*—'attached to, devoted,' may also be taken into consideration in this case and the Vedic *aryaman* or *aryamaya*[87]—'a companion, a bosom friend,' may probably be the original of ERIM.

Thus we find that in this Hymn of 35 lines, lacking 6 lines from 15—20, and a number of words which could not be construed for some reason or the other, there are a large number of Skr. roots especially to be found in the Vedic texts. We have already seen[88] that King Ṛṣabha of the ancient Indian tradition could be identified as the defied king of the Arameans, long before the third millennium B.C. So the epoch at which the Indo-Aryans inhabited this region between the Mediterranean and the Persian Gulf goes back to earlier times. A further proof of this can be had from the present analysis of the Chaldean Sun-Hymn and

86. See p. 383.
87. MW. p. 85.
88. See the article on "The Historic Importance of the Bronze Statue of Reshef Discovered in Cyprus",—by R. G. Harshe, *Bulletin, Deccan College Research Institute*, Poona, Vol. xiv, No. 3, 1955, pp. 229-236.

its Vedic reminiscences. Although the two languages under consideration widely differ from each other, in many respects, they inherit a common vocabulary which later served as a bed-rock to the so-called Semitic languages.

The total number of words, (excluding repititions) interpreted by Lenormant are about 96 out of which 62 could be traced to their original Sanskrit. It would be advantageous to give their consolidated list here for easy reference:

1. Skr. *adhi+i* or *abhi+as*—'to know, to study, to learn by heart.' Acc. ZU—'to know'; AZU—'to teach, to inform.'
2. Skr. *ama*—'strength, power.' Acc. AMIA—'crown.'
3. Skr. *amiṭa*—'glitter, splendour; a splendid shape;' *amitābha*—'a particular group of gods.' Acc. AMIA—'crown.'
4. Skr. *'an'*—'to breathe, to move, to go.' Acc. ANA—'sky' (place of wind; which appears to move).
5. Skr. *'ara'*—'spoke of a wheel.' Acc. AR—'door-bolt of heaven.'
6. Skr. *ākal*—'to lay hold of, to throw.' Assy. AKALU—'food.'
7. Skr. *ākan*—'to endeavour to obtain.' Acc. ÂK—'to do.'
8. Skr. *ātura*—'diseased' (*ā*—full+*tura*—disease). Acc. TURA—'disease.'
9. Skr. *ikh*—'to go, to move.' Acc. IQ—'to raise, to open.'
10. Skr. *ina*—'Lord.' Acc. ENI, ENU, ENŬ—'lord.'
11. Skr. *inu*—'name of a Gandharva, a semi-divine being.' Acc. ENI, ENU, ENŬ—'lord.'
12. Skr. *u*—'and, also, further;' also *uta*. Acc. U, Ŭ, UA—'and.'
13. Skr. *ud+ā+i*—'to rise.' Acc. UDDU—'rising of the Sun.'
14. Skr. *ud+i*—'to rise.' Acc. UDDU—'rising of the Sun.'
15. Skr. *ul*—'to burn.' Acc. ULLU—'feast, rejoicing.' Also ULU, UL.
16. Skr. *ullas*—'to sport, to divert, to delight, to shine.' Acc. ULLU. ULṢU = Assy. *elṣis*—'festival.'
17. Skr. *utsava*—'festival.' Acc. ULṢU—'feast, rejoicing.'
18. Skr. *ūti*—'protection;' *ū*—'to preserve.' Acc. UTU—the Sun.
19. Skr. *ene, ete* > *etad* = 'this.' Acc. ENE—'the, indeed, certainly.'
20. Skr. *eni*—'white splendour.' Acc. ENI, ENU, ENŬ—'Lord.'
21. Skr. *er* (*ā+ir*)—'to go to or into; 'also *arya*—'attached, devoted to'; *aryaman* or *aryamya*—'a companion, bosom friend.' Acc. ERI = ERIM—'servant.'
22. Skr. *ota* > *ve*—'to weave, to cover.' Acc. UTU—'the Sun.'
23. Skr. *kavala*—'a mouthful,' from *ku*. Acc. KU—'to eat.'
24. Skr. *ku*—'to sound' (possibly also the sound produced at the time of eating = eating). Acc. KU—'to eat.' Also KA—'mouth = organ of producing sound!

25. Skr. *kuvit*—'generally, by way of agreement.' Acc. KÚVA—'peacefully, by way of agreement.'
26. Skr. *kṛ*—'to do, to make.' Acc. GAR—'to do, to make.'
27. Skr. *khad, kṣad, skhad*—'to cut to pieces, to harass, to strike.' Acc. XAL—'to go quickly, to hasten, to attack, to strike.'
28. Skr. *khud*—'to sport wantonly or amorously.' Also *khurd*. Acc. XUL—'joy.' Assy. *ḫidutuv*—'joy.'
29. Skr. *gal*—'to swallow.' Acc. GALLAGE—'greedily.'
30. Skr. *gara*—'poison, sickness, disease.' Acc. GAR—'pain or suffering.'
31. Skr. *gā*—'to go, to come, to approach, to obtain,' etc. Also *ga* of *gam*—'to go.' Acc. GA—'to put further away, to restore, to bring back.'
32. Skr. *gu*—'to speak.' Acc. GU—'word, order.'
33. Skr. *guru*—'great.' Acc. GULU, GULA, GALLU, GAL—'great.'
34. Skr. *gṝ*—'to swallow.' Acc. GAR—'thing, substance' (used in the sense of food).
35. Skr. *ji*—'to expel from; to overcome a disease'. Also *jyā*—'to deprive of.' Acc. ZI, ZIZI—'to remove the fault, to set free.'
36. Skr. *tak*—'to fly, to rush, to pounce upon, to laugh at, to deride.' Acc. TAG—'to turn, to twist.'
37. Skr. *tas*—'to throw down.' Acc. TAS—'to be hostile.'
38. Skr. *tṝ*—'to cross, pass over' (esp. *avatṝ*—'to come down, to descend). Acc. TAR—'to put, to place.'
39. Skr. *daṅgh*—'to protect.' Acc. DINGIR—'god.'
40. Skr. *div*—'to gamble.' Acc. DIB—'to take, to catch hold of.'
41. Skr. *du* (*davati*)—'to go, to move.' Acc. DU—'to open.'
42. Skr. *du*—'to go, to move.' Acc. DU—'going, coming out, rising.'
43. Skr. *du*—'to burn, to cause sorrow or distress.' Acc. DUN—'valiant; to protect.'
44. Skr. *dūna* > *du*—'gone, going, moving.' Acc. DU, DUN—'to go.'
45. Skr. *dur*—'door.' Acc. DU—'door.'
46. Skr. *dūna*—'gone.' Acc. 'DUNALUM—'slip, omission, shortcoming.'
47. Skr. *nam*—'to bend, to turn away from.' Acc. NAM—'to deviate, to turn away from (the right path).'
48. Skr. *nam*—'bending down, subjecting or submitting oneself to.' Acc. NAM—'destiny.'
49. Skr. *paraśu, parśu*—'an axe, hatchet.' Assy. *parśu, paraśu*—(metaphorical sense) 'decision.'
50. *Skr. mā, mām, mama, me*—'the forms of the personal pronoun *asmad*.' Acc. MA, MAE ME—'I, to me, me.'

51. Skr. *makṣ* or *mrakṣ*—'to collect, to heap, to accumulate.' Acc. MAX—'very numerous, very great, very high.'
52. Skr. *mūla*—'an aboriginal native or inhabitant.' Acc. MULU > VULU > ULU > LU—'man.'
53. Skr. *rā*—'to grant, to give, to surrender.' *rarāṇa*—'giving, bountiful.' Acc. RA or RAN—'to take, to receive, to accept.'
54. Skr. *lab* (perhaps a lost cognate of *lamb*)—'to rest on, hang upon.' Acc. *LAB*—'action of looking on.'
55. Skr. *śap*—'to conjure, to swear, to execrate.' Acc. and Assy. ŚIPTU, ŚIPAT—'favourable magician.'
57. Skr. *śi*—'to sharpen.' Acc. ŚIGISSE—'victim.'
58. Skr. *śil*—'to glean' or *śīl*—'to meditate, to serve, to act.' Acc. ŚIL or ŚILA—'to dominate, to govern, to direct.'
59. Skr. *śīl*—'to meditate.' Acc. ŚILIMA—'of peace.'
60. Skr. *sarjū*—'lightning; *sṛj*—'to emit, to shed,' Acc. SERZI—'ray.'
61. Skr. *sidh*—'to ward off, to restrain, to ordain, to instruct.' Acc. ŚIDI—'to direct, to take care, to cure.'
62. Skr. *sṛ*—'to move.' Acc. SAR—'to push forward.'

What is more important in this case is not so much the verbal similarities between the Sanskrit and Accadian as pointed out above, but the ideas and expressions in the Chaldean Sun-Hymn to which almost parallel quotations can be given from the Indian Saura-Sūktas (Sun-Hymns) and other Vedic passages. These may be briefly pointed out here:

(1) Lord of the brilliant sky—(lines 1,2,3,4,5,6). Cf. *'viśvam ābhāsi rocanam'*=[89] Sāyaṇa: *'viśvam vyāptam rocanam rocamānam antarikṣam ā samantāt bhāsi prakāśayasi.'*

(2) Lord of the middle region of the sky—(lines 1-2). Cf. *'nṛcakṣā eṣa divo madhya āste'*[90]=Sāyaṇa: *'nṝn manuṣyān paśyan....eṣa savitā dyulokasya madhye āste niṣīdati.'*

(3) Rapid advance in the highest regions—(line 6). Cf. *'ā devo yāti savitā parāvato'*[91]= Sāyaṇa: *'savitā devaḥ....parāvataḥ dūradeśāt dyulokāt āyāti.'* For his speedy march the Sun has been called *'taraṇiḥ.'* Cf. Sāyaṇa's gloss[92] on the word: *'he sūrya, tvam taraṇiḥ taritā anyena gantum aśakyasya mahato ṣdhvano*

89. RV. I. 50.4.
90. RV. X. 139.2.
91. RV. I. 35.3.
92. RV. I. 50.4.

gantā asi. tathā ca smaryate : 'Yojanānām sahasre dve dve śate dve ca yojane ekena nimiṣārdhena kramamāṇa namo ऽ stu te.'

(4) The celestial Archangels....flock round thee—(line 7). The conception of the Archangels is not very common in the Indian Scriptures but a similar idea can be traced in the following: '*citram devānāmudagādanīkam*'[93]= Sāyaṇa : '*devānam....anīkam samūhārūpam citram āścaryakaram sūryasya maṇḍalam udagāt udayācalam prāptamāsīt.*'

(5) The servants of the Lady with the Crown carry you in festivity—(line 8). The Accadian original is vague but in its Assyrian version the Lady with the Crown is no other than the Mother of the Gods (Créatrice des dieux). It may be the Dawn also. Both these ideas are found in the Rgveda. 'Pūṣan has been called '*mātardidhiṣu.*'[94] He is one of the twelve sons of Aditi who represent the twelve suns of the twelve months. So, Sāyaṇa's interpretation of '*mātardidhiṣu*' as '*mātuḥ nirmātryāḥ rātreḥ didhiṣum patim pūṣaṇam abravam*' does not appear to be correct. (In the well-known *rātrisūkta*[95] the night has been regarded as the sister of *Uṣas* and the daughter of the Sun.) With reference to the Chaldean conception, two or three similar references to the Dawn may be considered: '*svasuryo jāra ucyate*;'[96] '*svasur jāraḥ śṛṇótu naḥ*;'[97] '*sūryo devīmuṣasam rocamānām maryo na yoṣāmabhyeti paścāt.*'[98] But the idea of going in procession to the Dawn will be found in : '*yāste pūṣan nāvo antaḥ samudre hiraṇmayīrantarikṣe caranti tābhir yāsi dūtyam sūryasya kāmena kṛta śrava icchamānaḥ*'[99] and that is very important for our purpose here. Thus we find common traditional legends well-preserved regarding the Mother of the Gods and the Sister of the Sun, in one form or the other, in the Chaldean Sun-Hymn and those of the Indo-Aryan Veda. This single reference is enough to prove that the Indo-Aryans had settled in the Mesopotamian region for a long time.

(6) The crowds greedily look on the—(line 10) : This idea is found in words like: '*viśvadarśato*' (=*viśvaiḥ sarvaiḥ prāṇibhiḥ dar-*

93. RV. I. 115.1.
94. RV. VI. 55.5.
95. RV. X. 127.3; 8.
96. RV. VI. 55.4.
97. RV. VI. 55.5.
98. RV. I. 115.2.
99. RV. VI. 58.3.

śanīyaḥ)[100] and *'viśvacarṣaṇiḥ'*[101] (= *vividhadarśanayuktaḥ*).

(7) One who knows the sins and merits—(line 26): *'ta ādityāsa uravo gabhīrā adabdhāso dipsanto bhūryakṣāḥ antaḥ paśyanti vṛjinota sādhu sarvam rājbhyaḥ paramā cidanti.'*[102]

(8) A ray of peace—(line 27); granting of favours—(line 13): *'ā te svastimīmaha āre aghāmupāvasam.'*[103]—"O Pusaṇ, we request you to grant us thy peaceful protection from which all evil is eschewed.'

(9) Sacrificial offerings—(line 29): *'mitrāya havyam ghṛtavaj-juhoti.'*[104]—"Sacrifice worthy offerings like ghee to Mitra."

(10) Removing of sins—(line 30). *'apa viśvā duritā bādhamānaḥ,'*[105] "destroying all sins." *'niraṁhasaḥ pitrā niravadyāt'*[106]—"Pulling us out of the sins, protect us..." etc.

(11) Curing of diseases—(lines 25, 27, 31, 32, 33): *'ṛhdrogam mama sūrya harimāṇam ca nāśaya.'*[107]—"Destroy my heart-disease and anaemia." *'apāmīvām bādhate'*[108]—"he destroys sufferings like diseases," etc.

In the Chaldean Sun-Hymn under review, the question is not of general diseases[109] but that of wet leprosy. In later Sanskrit literature, the poet Mayūra is said to have got his leprosy cured by consecrating a Century of Verses in praise of the Sun-god.

To conclude, we have found, in this study, that the Chaldean Sun-Hymn, consisting only of 35 lines (out of which 6 are missing) contains as many as 62 words from Sanskrit, especially from the Vedic and almost all the ideas and expressions are common to both—a fact which is very significant and it shows that the present Hymn must have belonged to the numerous lost hymns of the Rgveda the remnants of which are preserved in Chaldean though not in the same language and the same form.

100. RV. I. 50.4.
101. RV. I. 395.9.
102. RV. II. 27.3.
103. RV. VI. 56.6
104. RV. III. 59.1.
105. RV. I. 35.3.
106. RV. I. 115.6.
107. RV. I. 50.11.
108. RV. VII. 38.7.
109. It is a general belief that health can be had from the Sun: *'ārogyam bhāskarād icchet'*.

A NOTE ON THE SEMANTO-PHONETIC MAPPING OF MORPHEME-COMPOUNDS IN TAMIL*

By

P. C. GANESHSUNDARAM

In writing this note no pretence at all is made as to rigour. The subject matter too is in no way treated in accordance with any well-defined methodology. But, certain interesting observations are, as it were, 'mapped out' on a semanto-phonetic 'space', that is the observations are classified on a semanto-phonetic basis. The relationships between the elements mapped out are shown only for their suggestive value and not on account of any intrinsic basis found among them or postulated for them.[1]

A cursory glance over the morpheme material in Tamil reveals that, in general, any primitive or derived mono- or dissyllabic form consists of two morpheme elements, respectively the *base*-morpheme and the *suffix*-morpheme.[2]

Without paying any attention to the etymological developments of individual words, these words are grouped together almost at random in accordance with the homophonous nature of either of the two types of morpheme-elements mentioned. Whenever 'meanings' could be connected for any homophonous grouping, the grouping is developed as one unit. In other cases, it is divided into two or three units depending upon the number of unrelatable 'meanings' the homophonous elements may be standing for. (A grouping is considered as forming one unit when all the words with the same homophonous morpheme element and the same 'meaning' are listed and completed, or are capable of being completed).

* This is a sequel to the "Note on the morphemic value of consonants in Tamil", *Dr. Suniti Kumar Chatterji's Commemoration Volume*, 1955.

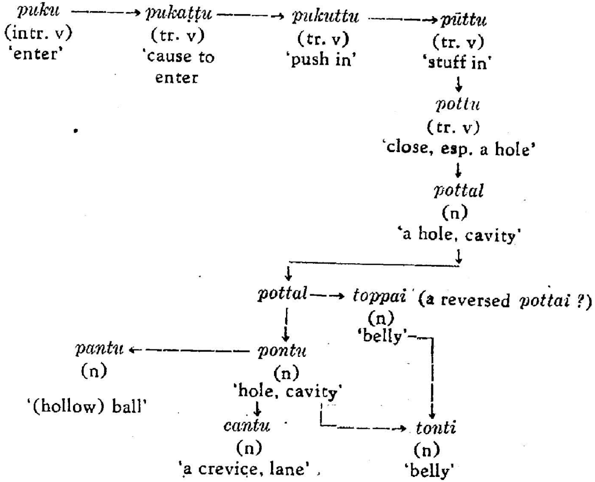
1. A semanto-phonetic mapping in a systematised fashion will be necessary for drawing any fruitful conclusions. The system developed by Rudolf Hallig and Walther von Wartburg (Begriffssystem als grundlage für die Lexikogrophie, Akdemie-Verlag, Berlin, 1952) may be adapted for this purpose.

2. The suffix-morpheme itself may be made up of different elements (viz., the actual suffix-morpheme preceded by an infix-morpheme). But since in this note no rigour is attempted, finer distinctions are abandoned and any mono- or dissyllabic form is taken to be made up of only two elements, viz., the base-morpheme and the suffix-morpheme.

It is generally found that the (constancy of) 'meanings' within any one grouping is maintained mostly by the consonantal element(s) in the morpheme. The rôle of the vowels is apparently undecided.

Taking now the groupings one by one, we have:

(1)



The verbs in this group denote an action done towards or over a 'hollow space' and all the nouns have the idea of 'hollowness' in common. The morpheme element contributing to this meaning is obviously *pu(k)-*, *pu(t)-*, *po(t)-* for the verbs *pot-*, (*top-*), *pont-*, *nt-* for the nouns. The *t-* and *-nt* of *tonti* seem to have come jointly from *pontu* and *toppai* (which itself is a reversal of *pottai*, which would have been the 'correct' from although not used). *Pantu*, as suggested by the morpheme-component must signify a 'hollow' ball, and indeed, quite often a cricket or golf ball, is called *kaṭṭai pantu* 'a solid ball'.

(2)

nulai

(tr.v)
'slip in, squeeze in'
(intr. v)

↓

nuḷacu ——————→ *nōṇṭu*

(tr. v) → (tr. v)

'spoil by boring a hole in (with the fingure or a blunt object, particularly in a soft material like a fruit)'

'bore a hole with the finger or a stick'

↓

noluntu → *nāṭṭu*

(tr. v) ——————→ (tr. v)

'iesert a stick into a hole'

'erect (a pole) in a hole (dug out on the ground)'

The base morpheme in this group is *n( )-*. The meaning changes when *n( )-* is replaced by other morphemes, keeping the *-ṇṭ-* unchanged (see (6) below).

(3)

u(ru)ṇṭai

'round object'

↓

maṇṭai

'skull, head'

↓

koṇṭai ——————→ (*toṇṭai* 'throat' perhaps reminiscent of Adam's apple ?)

'a round bunch of hair (in a particular type of hairdo)'

↓

cuṇṭai

'solanum foroum'

veṇṭai

'Lady's finger (veg.)'

The (suffix) –morpheme-element in this group is *-ṇṭ(ai)*, which stands for 'roundness'. The word *toṇṭai* is includey in this group because its meaning 'throat' may have come secondarily from the primary idea of apparent 'roundness' of the Adam's apple. In *veṇṭai* we find the base-morpheme-element *v-* which is found in some groups, (10), to have the meaning of 'spread out, range all round'. Perhaps *v-* and *-ṇṭ(ai)* in *veṇṭai* together give the idea of 'spreading out of (innumerable) round objects' as it happens when an over ripe 'lady's finger' bursts (!)

(4)

aṭal ——→ *aṭai* ——→ *aṭṭai* (n)

aṭal
'a flat piece made up of decayable or decomposable material'
↓
aṭar

aṭai
(n)
'an eatable prepared in a flat thick shape'
(tr.v)
'close an open space or enclosure by a flat thick object (e.g. a door)'

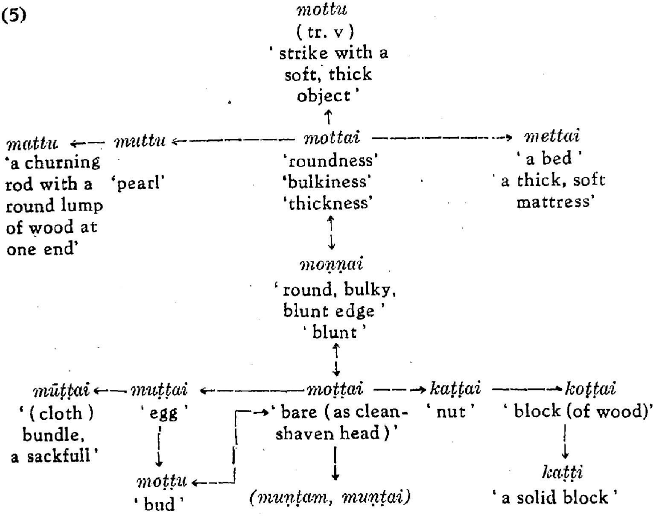
aṭṭai (n)
'a flat thick object, a card board'
↓
taṭṭai ——→ *taṭṭu*
(n)
'flat-thick shape (produced particularly as a result of beating down with a flat surfaced object'
↓
maṭṭai
(n)
'flat, thick bark of a tree'
↓
paṭṭai
(n)
'flat thick bark of a tree',
'belt, tie, scarf, etc. (flat objects)'
↓
cappaṭṭai
(n, adj.)
'flat, flatness'
↓
cammaṭṭi (?)
'hammer, a flattener' (?)

taṭṭu (tr. v.)
'beat (particularly) with a flat object'
(n)
'a plate (flat-thick object')
↓
(tuṭṭu)
(n)
('a coin, flat object' ?)
↓
taṭṭi

In this group the morpheme element *-ṭ()*, *-ṭ(ai)*, *-ṭṭ(ai)* seems to be responsible for maintaining the constancy of the idea of 'flatness or flat-thickness' throughout the group. From *aṭal* we proceed to *aṭar* 'to chip off (the chips being usually flat and thick)' and thence to *aṭartti* 'packed up (into the form of a flat, thick unit)'. (A forest when viewed from a mountain top may look flat and thick; hence we have *aṭarttiyāṉa kāṭu* 'a thick forest').

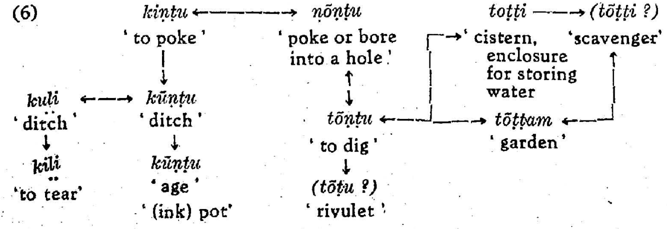
The group that follows represents the semanto-phonetic junction region of two or more units, one developed in accordance with the base-morpheme-element and the remaining in accordance with the suffix-elements. We thus arrive at the following mapping of a junction region:

(5)



The chief morphemes in question in this group are *mo()–* (base-morpheme) and *–tt(ai)* and *–ṭṭ(ai)* (suffix-morphemes). 'Roundness', 'softness and thickness' and 'hardness' are the chief ideas behind the morphemes.

(6)



It may be noted that *kuṇṭu* often means 'a round solid object' in addition to the meaning suggested in the above group: 'a (round) hollow ditch'. An object which can be fitted into a shape assumes the name of that shape itself or a name which contains the morpheme elements that stand for that shape. This tendency is also found in the group (13) below.

(7)

Nīntu 'swim'
↑
Nīr 'water' ← *Nīḷ* 'become long, extend' → *nīkku* 'remove, move away'
↓
nīṭṭu (tr. v) 'elongate, extend'
↓
nēr 'straight' ← *nimir* 'straighten up' → *(nōkku?)* 'see, look straight at'

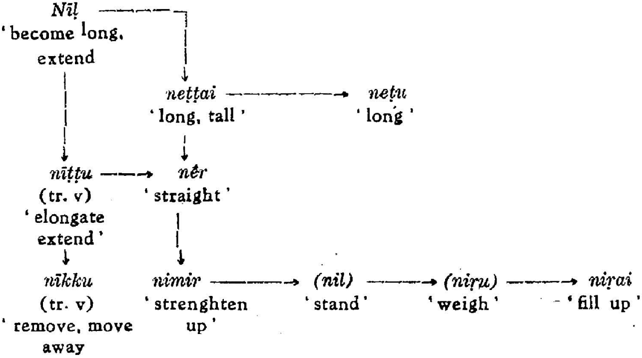
nēr 'straight' ↓ *nakar* 'move, get displaced'

nimir ↓ *nil* 'stand (up)'
↓
niṟu 'weigh (by making the balance straight)'
↓
niṟai 'fill up (to the brim)'

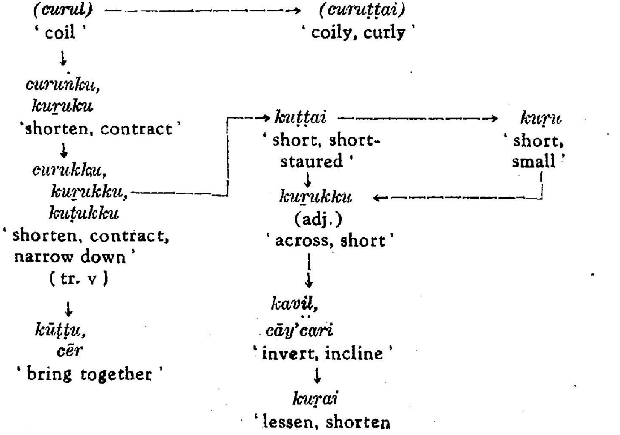
Here the base-morpheme is *n-*. It is of interest to note that the word for water in Telugu is *nīḷu* (Tamil *nīr*). Water or any liquid is called *nīr*, perhaps because of their commonly known property of extending when poured on a surface, rather than because of any of their static properties.

Group (8) and (9) below may be compared with each other without any special comments being made here :

(8)

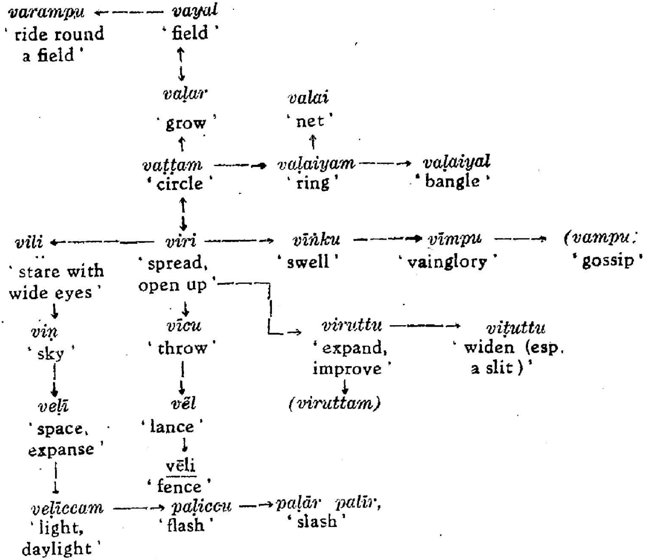


(9)



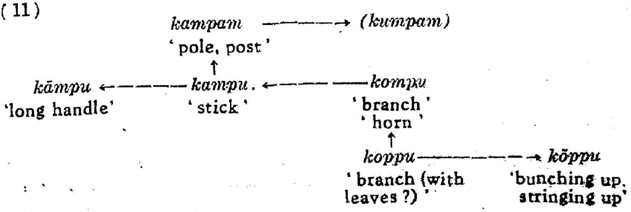
Group (8) has an *n*-element and group (9) as *k*– or *c*– element. The meaning in the latter group are opposed to those in the former.

(10)



The *v*– element in this group conveys the idea of 'expanding or proceeding outwards from a central point' or 'whatever is seen all round from a central point'. In *veḷiccam* in addition to the meaning contributed by the v– element, the element *–ḷi(c)–* brings out the 'flashing nature' of light as seen from its appearance also in '*paḷiccu*' and *paḷīr*. (Cf. English *flash, slash, lash*).

(11)



kaṭṭai 'block' ← *kattai* 'bundle' ← *kottu* 'bunch'

kaṭṭai 'block' → *kaṭṭu* 'tie up'

kattai 'bundle' ↓ *kaṭṭu* 'tie up'

kōr 'string up' ↓ *kōrvai* 'sequence, continuity'

In this group it is somewhat difficult to locate the central idea. But it appears that *ka*– and *ko*– denote in some way a many-one or one-many relationship. For example *ka*– may stand for the idea of 'one out of many' or 'many made into one' and *ko*– for 'one consisting of many'.

The influence of *-pp* and *-mp* also seems to be that of stressing either the 'oneness' (*-mp*) aspect or the 'manyness' (*-pp*) aspect.

In *kor*, *koppu* and *korvai*, the base element seems to be *k*– (already dealt with elsewhere* having the central idea of 'bring together'). Thus *koppu* may be the noun form *kor-pu* from the verb *kor*. 'Bring many together' seems to be the appropriate idea conveyed.

(12)

tēṅku 'get collected in one spot (esp. water) → *tēkkam* 'large collection (of water)' → *tekku* 'draw out (water) by immersing a vessel and collecting in it'

taṅku 'remain collected in one place' ← *tāṅku* 'collect in (hand)' 'support' → *vāṅku* 'receive (collect in hand)'

tāṅku ↑ *tēṅku*

taṅku → *tēṅku*

taṅku ↓ *tayaṅku* 'remain behind' 'hesitate'

tāṅku ↓ *toṅku* 'hang from a support' ↓ *tūṅku* 'hang above a certain level ↓ *poṅku* 'rise up to a higher level ↓

vīṅku ←——— *poṅku* ———→ *pokku*
'rise outwards, swell' | 'raise upwards'
↓
pontu
'bounce upwards'
↓
pantu
'ball'

The *v-* and the *-nt* elements have already been met with standing respectively for 'spreading outwards' and 'hollowness'. The newer elements in this group are *t()-*, *v(ā)-* and *ṅk*. The first two denoting 'coming towards' and the last one denoting 'support', 'state of stability'.

The base-morpheme *m(u)-* in the following group has something to do with 'a small prominent portion of something larger'.

(13)

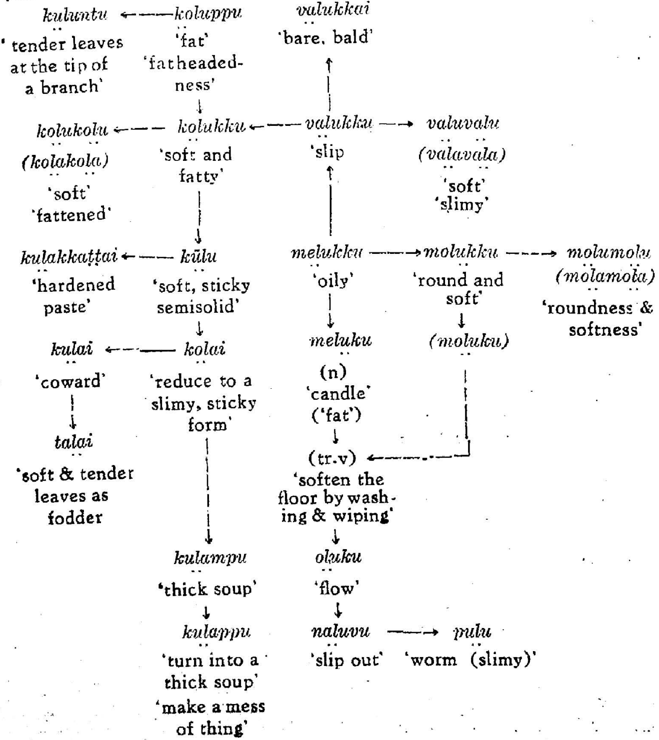
muṭṭu ———→ *mukku*
'knee' 'corner edge'
↑
|
muntu ←——— *muṉai* ———→ *muḷai*
'go forward (from a group of persons etc.)' 'appointed edge' 'seedling'
↓ |
mūñci ↓
'face' *muḻai* ———→ *muḻi*
| 'prominent swelling over a small area as a result of a hard hit' 'eye-ball, (particularly prominent)'
↓ ' small round projection in any large object'
mūkku ↓
'nose' *mulai*
| 'breast'
↓ ↓
(mutuku) *mūlai*
'back' 'corner'

It may not be too much of a stretch of imagination to observe that things which can be viewed geometrically from both sides to have similar configuration are described by the same set of morphemes (cf. *mūlai*,

mukku, 'corner') and things which can be fitted into something or which can be likened to something are described by words in which only part of the morpheme components are replaced (cf. *muli, mulai* as opposed to *kuli*; cf. the 'likeness' of *mulai* and *kulai* (!)).

In conclusion a morpheme element made up of a single consonant *-l-* is considered in the following group, for its remarkable function of retaining the idea of 'slimy, oily, softness' throughout the group.

(14)



It will indeed be fruitful to classify and 'map out' words on a semanto-phonetic basis and perhaps such a study will give the necessary clue to the Dravidian point of departure in describing the universe around us.

It is often found that our vocabularies are indicative of our culture and philosophy. The 'soul' of the Westerner, the '*ātmā*' of the Indo-Aryan and the '*uḷḷam*' of the Dravidian may indicate widely different things. They are untranslatables with respect to one another. These and other such words could be translated from one language into another if the two languages have grown under the same cultural and philosophical background. Otherwise all translations can only be approximations (or even distortions).[3]

3. Cf. in this connection Benjamin Lee Whorf, An American Indian Model of the Universe, IJAL, vol. 16, p. 67 ff.

NOTES ON AKSARA

By

J. A. B. van Buitenen

One of the several intriguing terms which play a not insignificant role in the period of thought before the Sāṁkhyakārikās and then fall into desuetude after this landmark has been passed is *akṣara*. In an original, but sometimes controversial study, *Akṣara: a Forgotten Chapter in the Indian Philosophy*, Modi[1] has shown the relative importance of this term in the later Upaniṣads, the Gītā and the Epic. It is not my intention here to enter upon a discussion of Modi's views but to study the term and its significance before the period at which he starts and to point out a background of associations which, in my opinion, will help us to understand the scope of the concepts later to be described by *akṣara*.

The etymology of the word *na kṣaratīti* has never been seriously questioned. An alternative etymology mentioned by Patañjali,[2] from *AŚ* with a suffixed *sara-*, has not found acceptance. Yet, it is interested to note this derivation of the etymologically transparent term, not because it would be important in itself, but because it betrays a measure of dissatisfaction with the etymology "unflowing" of *akṣara* "syllable".

That the word started its career as an adjective, meaning "not flowing away, unperishing", seems obvious. But already in the most ancient source, the Rgveda, the word is used in a specialized sense exclusively associated with Vāc, and Bergaigne for one would render the word everywhere with "syllable".[3] When, however, the word occurs in later texts where no special associations with Vāc are immediately apparent, all scholars prefer to return to the "etymological sense" and translate "indestructible, eternal" and variants, thereby separating it from *akṣara* "syllable". Is this separation really justified? In other words: does the later *akṣara* not continue the older *akṣara* "syllable"?

This 'later' *akṣara* may be dated from BĀUp. 3, 8. We note, however, that this is the only occurrence in the older Upaniṣads where the

1. P. M. Modi, *Akṣara*... (Thesis Kiel 1931; Baroda 1932).
2. Mahābhāṣya *ud* Siddhāntaślokavārttika *post* 1,1,8 *aśnoter va saro 'kṣaram;* cf. Bhāskara, Brahmasūtrabhāṣya 1,2,22 *aśnute vyāpnoti svavikārān ity akṣaram*
3. A. Bergaigne, *Etudes sur le Lexique du Rigveda*, J. As. 1883, pp. 480 ff., s.v. *akṣara;* a more qualified but substantially the same opinion gives H. Oldenberg, *Vedische Untersuchungen* 30, *akṣára, ákṣara im Rigveda* (ZDMG, 63; 1909), pp. 293 ff.

meaning "eternal principle" is preferred. Let us consider the other occurrences, BĀUp. 5,2,1; 3,1; 5,1; 5,3; 14,1-3; ChUp. 1,1,1; 5; 6; 7; 9; 10; 3,6-7; 4,1; 4-5; 2,10,3-4; 23,3; 8,3,5. In all these passages *akṣara* occurs in the sense of "syllable"; we may distinguish a more special sense, side by side with that of "any of the syllables into which a given word is analysed", namely "the syllable par excellence", the syllable *OM*. This is the same distinction as made by the author of the Gītā: *girām asmy ekam akṣaram* "I am the one syllable among all words" (10,25), and: *akṣarāṇām akāro 'smi* "I am the A among the syllables" (10,33).

The one *akṣara* OM is, in ChUp. 1, equated with the udgītha: *om ity etad akṣaram udgītham upāsīta/ om ity udgāyati* (1,1,1) "know that the udgītha is this syllable OM, (for) the udgātar sings the udgītha as OM." This equation udgītha = OM, which is repeatedly made, is of special interest; it cannot be completely explained by the fact that the udgītha begins with OM: the prastāva ends with this ubiquitous syllable; the equation with OM the udgītha is much more frequent than, e.g., with *ṛc*, though all mantras sung at the sacrifices end and almost dissolve in OM. The special identity of OM with the udgītha is, I think, better explained by the peculiar way in which certain sāmans are chanted, the so-called *aniruktagāna* "the singing of the unpronounced (syllables)". This is customary with the three pavamānasāmans which are chanted at the three soma pressings of the Agniṣṭoma: each syllable of the udgītha is substituted by the sound O. For instance the first udgītha of the bahiṣpavamānasāman, which is chanted at the prātaḥsavana, reads *pávamānāyéndave abhí devā́ṁ íya–* (RV. 9,11,1) or in Sāmavedic notation *pa*^{1}*va*^{2}*māna*^{3}*ye*^{1}*nda*^{2}*ve a*^{3}*bhi*^{2} *de*^{3}*va*^{1}*m iya*^{2r}– (SV. 651; 763), but is sung: OM o 2·o 2 o^{1r} o^{r} o^{r} o o 2 o o^{1} o^{r} o^{r} o o^{2} 1212. When one hears it chanted, it sounds like one long-drawn repetition of the initial OM, which it may well have been originally. I would consider it probable that the special significance of the otherwise mysterious equation udgītha = OM is to be understood from this peculiar mode of singing the udgītha at the soma pressings.

After this equation has been enlarged upon and the supremacy of the udgītha established, the speculations of this Chāndogya chapter are pushed farther and the *word* udgītha, which is of course identical with the *thing*, is analysed into its syllables *ud-gī-tha*. But we are to remember that the udgītha is really the supreme and that this analysis is therefore of the supreme as 'represented' by the udgītha. The akṣara *ut–* is equated with prāṇa (cf. also 1,1,5; this equation has its natural explanation in the fact that the Chandogas, much more than the Ṛgvedic and Yajurvedic priests require breath while singing), sky, sun (cf. 1,3,1)

and Sāmaveda; the akṣara *gī* is equated with vāc (= *gir*), atmosphere, wind and Yajurveda; the akṣara *tha* with anna, earth, fire and Ṛgveda.

These triads are fundamental classes of creation. They inventorize creation, which is thus represented as being finally reducible to the three syllables of the word *udgītha* which is also the one syllable OM. The reduction of all things to a triadic scheme which itself is reduced again to one ultimate, from which therefore all things derive, is characteristic of the cosmogonical and cosmological speculations of this age.[4] That here these triads of akṣaras and their correspondents are ultimately resolved in the unit OM, the akṣara *par excellence*, may already be clear from the context, but it is more explicitly stated elsewhere in the same upaniṣad. ChUp. 2,23,3-4 reads: *prajāpatir lokān abhyatapat/ tebhyo 'bhitaptebhyas trayī vidyā saṃprāsravat/ tām abhyatapat/ tasyā abhitaptābhyā etāny akṣarāṇi saṃprāsravan bhūr bhuvaḥ svar iti/ tāny abhyatapat/ tebhyo 'bhitaptebhya oṃkāraḥ saṃprāsravat/* ***tad*** *yathā śaṅkunā sarvāṇi parṇāni sarvā vāk saṃtṛṇṇā/ oṃkāreṇa saṃtṛṇṇāny evam oṃkāra evedaṃ sarvam oṃ**kāra** evadaṃ sarvaṃ/* That which is the last to "flow out" when the worlds etc. have been brooded by the creator, is the sap or juice, *rasa* or the essence. The syllable OM is the ultimate essence of all that is, because it is the basis of all speech: here we have to understand by "speech" primarily the sacred language of the Veda which is fundamental to the sacrifice which maintains the order of the universe.

Another version of this episode is found in JaimUpBr. 1,10,[5] where it appears as an exegetical paraphrasis of RV. 1,164,41-42, which we shall discuss later: (1) *sā pṛthaksalilaṃ kāmadughākṣiti prāṇasaṃhitaṃ cakṣuśśrotraṃ vākprabhūtam manasā vyāptam hṛdayāgram.... sahasrākṣaram ayuta-dhāram amṛtaṃ duhānā sarvān imān lokān abhi vikṣaratīti* "she, the milch-cow of desires, yielding (as milk) the elixir of immortality in separate waves, imperishable, compounded with Breath, possessed of Sight and Hearing, abundant in Speech, pervaded by Mind, having the heart as its top, consisting of a thousand akṣaras and ten thousand streams, flows out in all directions into all these worlds."[6] Then this text

4. cf. my *Studies in Sāṃkhya* 1. *An old text reconstituted*, 2. *Ahaṃkāra*, to be published in JAOS.

5. ed. by H. OERTEL, the Jāiminīya or Talavakāra Upaniṣad Brāhmaṇa (JAOS 16; 1894), pp. 49 ff.

6. OERTEL renders *pṛthaksalilaṃ kāmadughākṣiti .. amṛtaṃ duhānā* with "she that milks immortality possessing individual oceans (?), possessing wish-granting imperishableness;" but analyse *kāmadughā akṣiti;* the *pṛthaksalilam* corresponds to the *salilāni* of RV. 1, 164, 41; *duhānā* "yielding milk"; *akṣiti* here taken adjectivally to *amṛtam*, but probably a corruption of RV. *tákṣatī*, see below.

continues: (2) *tad etat satyam akṣaraṃ yad om iti/ tasminn āpaḥ pratiṣṭhitā apsu pṛthivī pṛthivyām ime lokāḥ/ yathā sūcyā palaśāni saṃtṛṇṇāni syur evam etenākṣareṇeme lokās saṃtṛṇṇāḥ*" "this is the *satyam akṣaram*, the OM: on it the waters are founded, on the waters the earth, on the earth these worlds: just as leaves are struck on a pin,[7] so are the worlds stuck on this akṣara." It is clear that the "cow of desires yielding immortality" is no one but Vāc herself who is frequently described as a cow. A parallel is furnished by ChUp. 1,3,5: *dugdhe 'smai vāg dohaṃ yo vāco doho 'nnavān annādo bhavati ya etāny evaṃ vidvān udgīthākṣarāṇy upāsta udgītha iti*: "Vāc yields milk—which is the milk of Vāc herself—to him, and rich in food and eating food will be he, who knowing thus recognizes these akṣaras of the udgītha, namely *ud-gī-tha*, for what they really are."

We find in the JaimUpBr. text just quoted that the akṣara OM is equated with satyam: *tad etat satyam akṣaraṃ yad OM*, which can also be rendered: *"this akṣara, viz. OM, is the satyam"*; both this translation and the one given above amount to the same equality of satyam and the akṣaram. We find that similar things are said of both. In one text the three vyāhṛtis, *bhūḥ*, *bhuvaḥ* and *svaḥ*, are derivates of udgītha = OM; elswhere the three are connected with *satyam* in a comparable manner. In BĀUp. 5,5,1 a creation myth starts with the Waters, which beget satyam or satyam brahman,[8] which begets Prajāpati, who begets the gods. The gods know only satyam. This satyam is syllabized into *sa-ti-yam*, the first and last syllables of which are true (*satyam*) while the middle one is untrue (*anṛtam*). The same notion is to be found in ChUp. 8,3,5 where of satyam, syllabized *sat-ti-yam*, *sat* and *yam* are said to be immortal and *ti* to be mortal: as a matter of fact, the *ti* does not exist really: satyam is just *sat-yam*. But the point is, of course, to analyze the supreme called satyam into three syllables which can support a triadic scheme: to the three syllables corresponds the triad of *bhūḥ*, *bhuvaḥ* and *svaḥ*. Then this text adds another complication: this triad constitutes the One Puruṣa, both macrocosmically as the person in the sun and micro-

7. The parallel *sūcyā* in JaimUpBr. where ChUp. has *śaṅkunā* shows that we can accept *śaṅku* here too in the common meaning of "pin, stake", and cancel the meaning "Blattrippe" assumed by BOETHLINGK (pw, s.v. 4) of which this ChUp. is the only occurrence; Hemacandra who gives this meaning *"pattrasirājāla"* (Anekārthasaṃgraha 2, 17) may also have deduced it from the same passage. The expression *sūcyā/ śaṅkunā saṃtṛṇṇa-* is parallel to the well-known ones *tantunā/sūtreṇa* etc. *otaṃ/ protam* etc., the notion being of one ultimate principle running through, and lying at the root of, all the variety of things.

8. E. SENART (*Bṛhad-āraṇyaka-upaniṣad, traduite et annotée;* Paris 1934), prefers to distinguish *satyam* from *Brahman* and emends: *satyaṃ brahma. [brahma] Prajāpatim*

cosmically as the person in the eye. But this notion too refers us back to comparable speculations about the udgītha in ChUp. 1,6,6-7.

This connexion of the tripartite OM = akṣaram = satyam with the Puruṣa myth is certainly not an accidental result of ever more comprehensive speculations about the Supreme One. As the BĀUp. 2,3 has it: the Name of the puruṣa is *satyasya satyam*.[9] Similarly akṣara is connected with the microcosmic person in the eye in JaimUpBr. 1,43, 7-9.[10] How closely all these conceptions are associated is shown by the connexions of the BĀUp. passage in 5,14. Here still another Supreme is posited, the Gāyatrī metre. This metre consists of four feet or pādas of eight syllables, which are counted to comprise respectively earth, atmosphere and sky (*bhūmiḥ, antarikṣam, diauḥ* ∾ *bhūḥ, bhuvaḥ, svaḥ*), the three Vedas (*ṛco, yajūṃṣi, sāmāni*) and three *prāṇas* (*prāṇaḥ, apānaḥ, viānaḥ*) : these three triads constitute three pādas of the Gāyatrī. The fourth pāda is described as follows: *athāsyā etad eva turīyaṃ darśataṃ pādaṃ parorajā ya eṣa tapati* "its fourth beautiful foot is the one who shines beyond space"[11] and further on: *saiṣā gāyatrī etasmiṃs turīye darśate pade parorajasi pratiṣṭhitā/ tad vai tat satye pratiṣṭitam*". "This gāyatrī is based on this beautiful foot which is beyond space: that foot again is based on satyam." The one who shines beyond space is no doubt the person in the sun. The passage recalls ChUp. 3,12 where basically the same speculation is found which is, however, more faithful[12]

9. In this related text *satyam* is distinguished into *sat* and *tyam*, the former representing *brahman's* or *satyam's* embodied, mortal and static aspect, *tyam* its disembodied, immortal and dynamic aspect. The puruṣa is the essence of the latter aspect.

10. *karma vā etat tasya sāmno yad vayaṃ sāmopāsmaha iti/* (8) *atha kim upāssu iti/ akṣaram iti/ katamat tad akṣaram iti/ yat kṣaran nākṣīyateti/ katamat tat kṣaran nākṣīyateti/ indra iti/* (9) *katamas sa indra iti/ yo 'kṣan ramata iti/ katamas sa yo' kṣan ramata iti/ iyaṃ devateti hovāca/* (10) *yo 'yaṃ cakṣusi puruṣa eṣa indra esa prajāpatiḥ/* [*sa*] *samaḥ pṛthivyā sama ākāśena samo divā sarveṇa bhūtena/ eṣa paro divo dīpyate/ eṣa evedaṃ sarvam ity upāsitavyaḥ/*.

11. cf. *paro divo dīpyate* JaimUpBr. 1, 43, 10 (quoted n. 10), and my remarks in *Studies in Sāṃkhya* 3: Sattva (to be published in JAOS).

12. The change of the probably original division into one foot or quarter revealed and three unrevealed is interesting. It cannot be accidental that the change coincides with an increasing preoccupation of these thinkers with a more or less *transcendent* Original Being that at creation manifests itself in a *triad*. At the same time it would seem probable that the idea of the three footsteps of Viṣṇu exerted influence: Viṣṇu's connexion with the Puruṣa who is the demiurge definitely belongs in the complex picture. That the four stages of waking, dreaming, dreamless sleep and *turīya* is another application of the same triadic-tetradic scheme is obvious. One wonders if the remarkable notion of three unrevealed or unuttered parts and one revealed or uttered part of Vāc/Puruṣa

to its ultimately Rgvedic prototype: *Gāyatrī vā idaṃ sarvaṃ bhūtaṃ yad idaṃ kiṃ ca/ vāg vai gāyatrī vāg vā idaṃ sarvaṃ bhūtaṃ gāyati ca trāyate ca.* The gāyatrī is sixfold: all beings; vāc; earth; body; heart; prāṇas; but also four-footed, which no doubt refers to such divisions as explained in the above BĀUp. passage. The ChUp. quotes the Rgveda (10,90,3): *etāvān asya mahimā 'to jyāyāṃś ca pūruṣaḥ/ pādo 'sya viśvā*[13] *bhūtāni tripād asyāmṛtaṃ divi//* "so far goes its greatness; the puruṣa is greater than it still: all beings make up one foot (or quarter) of him; three feet (or quarters) are immortal in heaven." This description of the Puruṣa is elsewhere given of Vāc (1,164,45) *catvāri vāk párimitā padāni tāni vidur brāhmaṇā yé manīṣíṇaḥ/ gúhā tríṇi níhitā néṅgayanti turīyaṃ vācó manuṣyā vadanti//* "Vāc is measured in four feet: the keepers of the brahman who are wise know these feet: three, put away in hiding, do not stir; the fourth foot of Vāc is spoken by men." It would seem that the Puruṣa has succeeded to some of the functions of Vāc when his association with Vāc became more significant in cosmogonical speculations. We see how Vāc is described as the female partner of the creator, Prajāpati, Vācaspati, Bṛhaspati, while at the same time his identity with Vāc is confirmed.

It is significant that in the above sūkta 1,164 akṣara is used several times in connexion with Vāc: (24) *gāyatréṇa práti mimīte arkám arkéna sāma traíṣṭubhena vākám/ vākéna vākáṃ dvipádā cátuṣpadā 'kṣáreṇa mimate saptá vāṇīḥ//* "With the *gāyatrī* foot he measures the *arka*, with the *arka* the *sāman*, with the *triṣṭubh* foot the *vāka*, with the two-foot and four-foot *vāka* the recitation, with the syllable the seven voices." (39) *ṛcó akṣáre paramé vyòman yásmin devā ádhi víśve niṣedúḥ/ yás tán ná véda kíṃ ṛcā kariṣyati yá ít tád vidús tá imé sám āsate//* "What will he do with the hymns who does not know the syllable of the hymn, which is the highest heaven where the gods all live? Only those who know it are sitting together here." (41-42) *gaurír mimāya salilāni tákṣaty ékapadī dvipádī sā cátuṣpadī/ aṣṭāpadī návapadī babhūvúṣī sahásrākṣarā paramé vyòman// tásyāḥ samudrā ádhi ví kṣaranti téna jīvanti pradíśaś cátasraḥ/ tátaḥ kṣaraty akṣáraṃ tád víśvam úpa jīvati//* "The buffalo cow has lowed, building lakes, having become one-footed, two-footed, four-footed, eight-footed, nine-footed—with a thousand syllables in the highest heaven: on the seas that flow out from her do

did not have a basis in sacrificial practice originally, somewhat comparable perhaps to the *aniruktagāna* of the pressing sāmans above. A glance at the development of Vedānta speculation shows how fertile the conception of the partly manifest partly transcendent Demiurge could be.

13. ChUp. reads *sarvā* for *viśvā*.

all four world-quarters live: therefrom flows the Syllable: on it lives everything."

As BERGAIGNE already remarked[14] there is no reason to assume for *akṣara* in 42c another meaning than it has in *sahásrākṣarā;* GELDNER, who apparently cannot believe in the metaphysical significance of the speculations on metres and syllables,[15] prefers to render the second *akṣára-* more appropriately with "das Unvergängliche". The Indian exegetes differ: Yāska and Sāyaṇa prefer "water", Sāyaṇa elsewhere "syllable".[16] The author of the JaimUpBr. text quoted above patently takes *akṣára* in 42c as "syllable", though it is doubtful whether the Rgvedic poet had already the syllable OM in mind. A comparison of the JaimUpBr. exegesis is interesting: *gaurī* is paraphrased with *kāmadughā;* in *pṛthagsalilam* we have doubtless to recognize the RV. *salilāni,* the "lakes" or "pools" anticipating the variously footed metres summed up in the sequel. It is exceedingly tempting to see in *akṣiti* a corruption of RV. *tákṣati.* The attributes *prāṇasaṃhitam* etc. certainly mean to explain *ékapadī,* though we may be at a loss to explain some of these explanations.[17] On the other hand it would seem that the JaimUpBr. author understood *sahásrākṣarā* as "having a thousand streams", as the explicative or associative *ayutadhāram* would suggest. The expression *sahásrākṣarā paramé vyòman* in the sūkta is interesting: the recurring expression *akṣáre paramé vyòman,*[18] to be explained either as "in the syllable which is the highest heaven" or as "which is *in* the highest heaven" is probably at the root of it.

It is clear that the above upaniṣadic texts continue old speculations about an *akṣara* that had already in Rgvedic "times" been more or less

14. l.c.

15. Cf. his typical statement *ad* 1,164, 23: "Hier steight zunächst der Dichter von den Höhen der bisherigen Spekulation in die Niederungen der dichterischen Technik und der rituellen Praxis hinab",—in contrast to such stanzas as ib. 20-22 which he admires; in my opinion such an attitude which prefers to assume that agreeable statements as in 20-22 are more important because they are more easily comprehensible imperils a proper understanding of what was important to the authors: personally speaking I would always consider such views as are the outcome of the daily preoccupations of the thinker to be more significant than pleasant but vague parables.

16. Yāska, 11, 41; Sāyaṇa *ad hoc;* Sāyaṇa: "OM" *ad* TaittBr. 2,4,6,12 (GELDNER).

17. *prāṇa* (in the context of the speculations we are dealing with mostly singular) ∾ *ekapadī; cakṣuśśrotram* ∾ *dvipadī; vāc* ∾ *catuṣpadī* because of the "four feet"; *manas* as *aṣṭāpadī* escapes me; *hṛdaya* as *navapadī* possibly on account of its associations with the *navadvāram puram?*

18. The locution remained popular but was no doubt soon understood as "imperishable supreme heaven".

clearly articulated as an ultimate and supreme principle without losing its significance "syllable". Sometimes the akṣara is conceived as a sort of hypostazised Word, as in 1, 164, 39, sometimes as the simplest measure of recited mantras, as in ib. 24, sometimes as the essence of life as in ib. 42: but these distinctions are ours, not the Rgvedic priest's. Elsewhere the syllable is the prime utterance of Vāc, as in 3,55,1 ab: *uṣásaḥ pū́rvā ádha yád vyūṣúr mahád ví jajñe akṣáram padé góḥ/* "When the ancient dawns first dawned the great Syllable was born in the footstep of the cow." Here another association of akṣara with the sun is hinted at. The footstep of the cow is also the step or foot of metrical Vāc. That the syllable, as the common denominator of the sacred mantras, can represent the universal order which is based on the sacrifice, is almost a matter of course: so we read in 6,16,35-36: *gárbhe mātúḥ pitúṣpitā vididyutānó akṣáre/ sīdann ṛtásya yónim á// bráhma prajā́vad á bhara jā́tavedo vícarṣaṇe/ ágne yád dīdáyad diví//* "Thou that art shining in the syllable, the womb of your mother,[19] as your father's father, sitting in the womb of the ṛtam, fetch thou, O excellent Agni Jātavedas, the child-bearing bráhman which radiates in heaven." Evidently we have to regard the womb of the mother, the womb of the *ṛtam* and the heaven in which brahman radiates as parallel expressions: we see how easily and naturally *akṣara, ṛtam = satyam* and *brahman* in its ancient sense of powerful sacred utterance could be juxtaposed and be substituted for one another, as we see happen frequently in later texts.

It cannot be doubted that the "etymological" meaning "unflowing, imperishable" was constantly in the mind of he priests speculating about the syllable. It is this deliberately sought polysemy characteristic of Vedic poetry which perhaps reveals best the mentality behind the speculations on Vāc: it is not mere abstract theorizing to reduce the Universe to its order, the order to the sacred Word and the Word to its metre and ultimate unit of syllable, but the immediate experience of the composing poet himself. It cannot be accidental that the supremacy of Vāc was upheld by priest-poets who themselves attempted—and with what success—to express ever more meanings by ever more pregnant words. With a beautiful stanza like *uṣásaḥ pū́rvā ádha yád vyūṣúr mahád ví jajñe akṣáram padé góḥ* the poet could express not only the dawns of the first day, the first step of a cow at dawn to the river, the primacy of the syllable of the first revelation of the sacrificial world-order, but even his

19. GELDNER, however, renders: "Im Leibe der Mutter Vater seines Vaters, bei der (heiligen) Rede(?) aufleuchtend, sich in dem Schosz der (Opfer-) Ordnung setzend, Bring uns das kinderreiche Segenswort, das im Himmel leuchtet, du ausgezeichneter Jātavedas Agni."

own start on composing a new song while driving his cow to the river at dawn! The resulting obscurity is not an obscurity for its own sake; it is the expression of layer upon layer of identities.

The etymological speculations on akṣara suggest that its derivation[20] was more a hindrance than a help to thought. Akṣara is conceived both as the sap or essence that "flowed out" and as the ultimate term of an ascending series which is no longer "flowing out" into an ulterior essence. But the last is always the first, and from the "unflowing" flow out the first seeds of creation. In JaimUpBr. 1,1 we read *athaikasyākṣarasya rasaṃ nāśaknod ādātum/om ity etasyaiva seyaṃ vāg abhavat/ om eva nāmaiṣā/ tasyā u prāṇa eva rasaḥ* etc. "He (Prajāpati) could not take the sap of this akṣara. Of this akṣara, viz. OM, Vāc came to be: Vāc is in fact OM. Her sap is Breath". Elsewhere, in 1,23, there is an attempt to push further; but there is nothing beyond the "irreducible imperishable Syllable': (1) *ayaṃ evedam agra āsīt/ sa u evāpy etarhi/* (2) *sa yas sa ākāśo vāg eva śā/ tasmād ākāśād vāg vadati*: "this very ether was here at the beginning: the same is still here. This ether is Vāc, for Vāc speaks from the ether". Then it is said that Prajāpatī squeezed out Vāc: her sap was the worlds: their sap the deities: their sap the triple Veda: their sap the three vyāhṛtis: and of their sap it is said: *tad etad akṣaraṃ abhavad oṃ iti yad etad/* (8) *sa etad akṣaram abhyapīlayat/ tasyābhipīlitasya rasaḥ prāṇedat//* (1,24,1) *tad akṣarad eva/ yad akṣarad eva tasmād akṣaram/* (2) *yad v evākṣaram nākṣīyata tasmād akṣayam/ akṣayaṃ ha vai nāmaitat/ tad akṣaram iti parokṣaṃ ācakṣate*: "he squeezed this akṣara; when it had been

20. Although, again, we have no reason to doubt the correctness of the traditional etymology, it is curious to note that *KṢAR-* is very rarely used to describe the flowing of recited mantras: we would expect at least some usage of this root which would explain why its negation *a-kṣara* is used specially for "syllable". In the ṚV. *KṢAR-* is used once with *gīr* (1,181,7) *ásarji vāṃ sthávirā vedhasā gīr bāḷhé aśvinā tredhā kṣáranti*, which GELDNER renders "es wurde für euch beide, ihr Muster, eine alte Lobrede losgelassen, dreifach in starkem (Strom?) sich ergieszend, ihr Aśvin". We may also cite 8, 49, 6cd *udríva vajrinn avatá ná siñcaté kṣárantīndra dhītáyaḥ* "wie ein wasserreicher Brunnen dem, der daraus schöpft, so flieszen (dir) die Gebeten zu, Indra Keulentrager"; and 8,50,4, where GELDNER renders *dhītáyaḥ* differently: *anehásaṃ vo hávamānam ūtáye mádhvaḥ kṣaranti dhītayáḥ* "zu dem fehlerlosen (Soma), der (ihn) zu eurem Beistand lädt, strömen die süsze Gedanken". Though, as we see *KṢAR-* with a word for speech is not altogether unknown, the available instances do not show why the negative *a-kṣara* (which once, 1,164,42, flows paradoxically itself) would have come to denote "syllable". Other possibly distinguishable meanings of *akṣára, ákṣara* do not help much because they are too near that of "syllable"—if distinguishable at all: cf. OLDENBERG'S balanced account l.c.

squeezed, sap trickled forth.[21] That flowed, hence it is akṣara. As the akṣara did not perish, therefore, it is imperishable. In fact it is the Imperishable (*akṣayam*): they call it *akṣara* to mystify." We see that in spite of its being "unflowing" further principles do indeed flow out of akṣara. The above account of 1,23 starts from ākāśa = Vāc, produces from it the worlds, then reverts the order and reduces the Universe, *via* the sacrificial deities, the Vedas, the vyāhṛtis, back to akṣara, which nc doubt due to its etymology is here considered an end, but in 1,1 a beginning. Do we meet here already the first inklings of the later aporion of how to derive from the transcendent Unchangeable the phenomenal changes? For akṣara, being the ultimate juice and essence of things, is therefore their *pratiṣṭhā* "standing-place, foothold, firm basis": JaimUpBr. 1,10,10 has: *sthūṇām eva divastambhanīṃ sūryaṃ āhur antarikṣe sūryaḥ pṛthivīpratiṣṭhaḥ/ apsu bhūmiś ca śiśyire bhūribhārās satyaṃ mahīr adhitiṣṭhanty āpaḥ//* "they say that the sun is the pillar that supports the heaven; the sun rests on the sky which reposes on the earth; the lands of the earth, which support many things, lie on the waters; and the wide waters are rested on the satyam." Satyam is explained: (11) *om ity etad evākṣaraṃ satyaṃ/ tad etad āpo 'dhitiṣṭhanti.*

The inner coherence of all these speculations about akṣara is clear enough. They obviously originate from milieux that were intensely preoccupied with the sacred Word which rules and supports the sacrificial order of the Universe. Searching for that principle from which the established order of ritual equilibrium derives its being, the sacred utterance of ṛc, yajus and sāman which is reflected in and contains all other triads that constitute the world, they arrive at the 'hypostasized' Sacred Word, Mother of creation. But they try to push beyond this ultimate and find a more ultimate basis in the metres that measure the Word, or the feet that measure the metres, or the syllable that measures the foot. It is not yet a particular syllable which is supreme: it is the Syllable as such which is the ultimate because it cannot be reduced further. At one stage this Syllable came to be identified with OM, that ubiquitous syllable of consent,[22] in which all recitations have their beginning and end[23] and which from minute to minute is heard resounding at the great sacrifices,

21. cf. e.g. ŚatBr. 3,9,2,1.
22. ChUp., 1,1,8.
23. cf. e.g. ChUp. 1,1,9, *teneyaṃ trayī vidyā vartate/ om ity āśrāvayati/ om iti śaṃsati/ om ity udgāyati/ etasyaivākṣarasyāpacityai mahimnā rasena*: "with it (the Syllable) the triple Veda proceeds: with OṂ the adhvaryu (YV.) calls on (the hotar), with OṂ the hotar (ṚV.) recites the śastra (which ends every mantra with OṂ SavOṂ), with OṂ the udgātar chants the udgītha: (they do so) to honour this Syllable for its greatness, its essence."

passed back and forth between the priests of the three Vedas scattered over the sacrificial ground—centre of life and order where these thinkers always returned to find material and inspiration. This akṣara is on the same plane as other terms in which the same quest for the ultimate behind the Order found alternate end-points: *ṛtam, satyam, brahman.*

When we now turn to BĀUp. 3,8, where Yājñavalkya instructs Gārgī about the akṣara, we notice undoubtedly a more rarefied atmosphere,[24] but there is no reason whatever to separate Yājñavalkya's akṣara from the akṣara we have just studied. Here too the celebrated metaphysician shows his well-known preference for apophasis. To Gārgī's question: what is the frame on which is woven,[25] warp and woof that which is above heaven, below the earth and in between (a formulation that reveals greater philosophic refinement: the obvious heaven, atmosphere and earth are no longer comprehensive enough, but it is clear that the old triad persists) and that which is past, present and future,—Yājñavalkya replies: the *ākāśa.* But Gārgī demands more: what is the frame on which the *ākāśa* itself is woven? The reply is: akṣara, but a completely immaterial akṣara. At its behest do sun and moon, heaven and earth stand supported. But even Yājñavalkya cannot get completely rid of the associations of the Syllable: "at the behest of this syllable do people acclaim generous (yajamānas?), the gods the yajamānas, the deceased ancestors the ladle (with the oblation)".[20]

The MaitrUp. 6,8 furnishes an ancient commentary on the manner in which Yajñavalkya's akṣara could still be understood: *dve vāva brahmaṇo rūpe mūrtaṃ cāmūrtaṃ ca/ atha yan mūrtaṃ tad asatyaṃ yad amūrtaṃ tat satyaṃ tad brahma taj jyotiḥ/ yaj jyotir sa ādityaḥ/ sa vā eṣa/ om ity etad ātmābhavat/ sa tredhātmaṇaṃ vyakuruta/ om iti tisro mātrā/ etābhiḥ sarvam idam otaṃ protaṃ caiva/ asmīty evaṃ hy āha/ etad vā āditya om ity eva dhyāyann*[27] *ātmānaṃ yuñjīteti.* The three mātrās or morae of OM contain all manner of other triads which we have met by the way. The terms clearly refer us to various upaniṣadic passages, and *otaṃ protaṃ caiva* evidently to Yajñavalkya's *ākāśe eva tad otaṃ ca protaṃ ca* etc.

24. But we must note that 3,8 is really a polished sequel to 3, 6 where this rarefied atmosphere is much less in evidence.
25. cf. GONDA's remarks on the significance of this expression in *Notes on Brahman* (Utrecht 1950), pp. 44 ff.
26. Note that the Brahmasūtrakāra had reason to explain that this *akṣara* is brahman (1, 9, 10) : *akṣaram ambarāntadhṛteḥ* "(brahman is) akṣara, because (akṣara) supports (earth) and heaven".
27. Correction of MARYLA FALK, *Nāmarūpa and Dharmarūpa* (Calcutta 1943) p. 42, n. 1, misprinted (?) dhyayān (unless we must restore *dhyāyāt*).

Later, in the later upaniṣads whose authors no longer found their inspiration exclusively in the world of ritual and had the results of their predecessors to start from, akṣara as a 'philosophic' principle has lost most of its associations with the Sacred Word;[28] side by side with the meaning "syllable" in a more strictly grammatical sense and usage, the meaning "Supreme Being", which must derive from the ancient "Great Syllable", goes its separate way. The term could lend itself readily to the meaning "Supreme Being": it was re-etymologized as the "Imperishable". Less pliant terms like *vāc* itself were doomed,[29] while other terms from the same complex, like *satyam* and *brahman* could again more easily be retained: *satyam* could convey not only "truth, true word" but also "that which is truly so, the true and real and dependable"; *brahman*, whether or not a derivative of *BṚH-*,[30] was so etymologized, while it also enjoyed the double advantage of being an archaic word and conceptually but vaguely defined. That the ancient associations could long persist is shown by the history of Indian thought. There can be little doubt that both the *sphoṭavāda* of the grammarians and the *śabdādvaita* of the vedāntins continue with all the philosophical sophistication of later thought the ancient complex of ritualistic speculations in which akṣara belongs. Śaṅkara was still aware himself that the immaterial and transcendent akṣara of Yajñavalkya's instruction was, or could be, interpreted as the "syllable OM"[31] and he went out of his way—according to Bhāskara who refuses to follow him here[32]—to refute this interpretation.

28. Though they are not altogether absent in ŚvetUp. 4,8; 4,18.
29. Some of her functions were taken over by Sarasvatī, some by Viṣṇu's consort Lakṣmī.
30. GONDA'S case for a derivation from *BṚH* seems unanswerable; for a balanced discussion of other views as well, see his *Notes on Brahman*.
31. Bhāṣya *ad* BrS. 1,3,10.
32. Bhāṣya *ad* BrS. 1,3,10; interesting is that Bhāskara attributes this view to the sphoṭavādins: *kecid* (i.e. Śaṅkara) *akṣaraśabdasya varṇe prasiddhatvād akṣaram oṃkāra iti pūrvapakṣayanti/ vaiyākaraṇadarśanaṃ ca sphoṭaḥ śabda ity avatārya gakārādayo varṇā eva śabdā iti sthāpayanti/ tad etad adhikaraṇanāsaṃbaddham.*

A NOTE ON AN EXAMINATION OF THE NATURE OF STRUCTURE

By

B. CHAITANYA DEVA and C. R. SANKARAN

In the *Addendum* entitled "An examination of the nature of structure" to the paper "Structure in Speech—The Physical Reality of the Phoneme,"[1] the first author has written towards the close, "entropy is always and ever *zero*, information complete. *Existence is a direct, immediate relation that IS.*"

The object of the present note is to avoid any possible misunderstanding on the part of the readers of the said addendum.

The absolute zero (entropy zero) is, as it were, the 'infra' end of the spectrum, whereas 'the entropy-zero stage here described is *all*-knowledge', is the 'ultra' end of the spectrum. They are only apparently similar in having *no* entropy; but this lack of entropy in both the cases is attained in ways which are fundamentally different, one from the other, and the relationship between the two is on the one hand, similar to the relationship between the alpha-phoneme and the alpha-phonoid and on the other hand, is also similar to the relationship between the two time-scales *T* and *t* of E. A. MILNE.[2]

Lastly, the statement that the 'relationship' between the (external) 'stimulus' and the 'self' *"implies a state of being that is independent and yet in relationship with the stimulus and response"* expresses a deep experience, akin to the one reflected in the Gauḍapāda Kārikā, III, 17, and Śaṅkara's commentary thereon.[3]

It is then that the individual mind (or consciousness), along with the brain, is one with the Universal Mind (or Consciousness). [Cf.,

1. C. R. SANKARAN and P. C. GANESHSUNDARAM, Structure in Speech—The Physical Reality of the Phoneme, Sonderheft on Information Theory, *Fernmeldetechnische Zeitschrift* (with an addendum by B. CHAITANYA DEVA on "An Examination of the Nature of Structure") . In press.
2. For, in MILNE'S own words (in his posthumous work), "We pass from one method of measuring time to another which differs from it far more fundamentally than by a mere change of units and of zero" (*Modern Cosmology and the Christian idea of God*, Oxford, 1952, p. 95; quoted by G. W. Scott BLAIR in his, Time of Psychology and of Physics, *The British Journal for the Philosophy of Science*, vol. III, No. 12, February, 1953, p. 359).
3. Śri Vāṇi Vilās Press, Śrirangam, 1910, p. 159. Cf. *sarva ananyatvāt*. Also, Śri Ramakrishna Āśrama edition, Mysore, 1949, p. 177.

"The higher mind, but barring techniques like Yoga, ordinarily makes no nexus with the personal consciousness," Benjamin Lee WHORF, Language. Mind and Reality, *ETC., A Review of General Semantics*, vol. 9, No. 3, Spring 1952, p. 178.] And this is the level of the alpha-phoneme, while the alpha-phonoid is the level at which such a mind co-exists with the dynamic spatio-temporal patterns of activity in the cortex. (Cf. C. R. SANKARAN and P. C. GANESHSUNDARAM, Time and Speech-Structure, BDCRI, vol. 12, 1952, p. 403, footnote 9; cf. also, C. R. SANKARAN, P. C. GANESHSUNDARAM and B. CHAITANYA DEVA, Reversed Speech and the Alpha-phoneme Theory, BDCRI, vol. 17, 1955, p. 4 and footnotes 13 and 14; cf. too, C. R. SANKARAN, P. C. GANESHSUNDARAM, B. CHAITANYA DEVA and A. D. TASKAR, A Study of Accent in Relation to the Alpha-phonoid Theory, Dr. Suniti Kumar Chatterji Commemoration Volume, *Indian Linguistics*, vol. 16, 1955, p. 197 and footnote 4).

Obviously, therefore, the 'passage of time' with the before-after orders [cf., "the idea inherent in causality that that which is earlier is the determining reason for what follows, and not vice versa, impresses on our Probability Judgement a distinguished direction of time." Hermann WEYL, *Philosophy of Mathematics and Natural Science*, Princeton, 1949, p. 204], perceived both at the ordinary levels of consciousness and sub-consciousness of the human mind, in a purely empirical frame of reference, is due to the dissociation between the mind and the dynamic spatio-temporal patterns of activity in the cortex. (Cf. also in this connection, J. W. DUNNE, *'Intrusions?'*, Faber and Faber, London, 1955 [?]).

Ultimately, "our application of Geometry to Nature is purely conventional, because an element of choice is involved." (Cf. G. J. WHITROW, The Epistemological Foundation of Natural Philosophy, *Philosophy*, vol. 21, 1946, p. 8) : Any 'temporal' structure can be assigned to Nature by appropriate changes in the statement of physical laws.

It is only at the level when the Mind is dissociated from the dynamic spatio-temporal patterns of activity in the cortex, "a rhythmic series of flashes appears to break down some of the physiological boundaries between brain regions, with the result that any area of the brain may be set into resonant oscillation, leading to bizarre sensations and hallucinations in normal people, to epileptic seizures in predisposed subjects." (Cf. W. G. WALTER, Electroencepahalography, *Scientia*, vol. LXXXVI, 1951, p. 67. W. G. WALTER, however, appears to be an empiricist who 'subscribes to the *tabula rasa* doctrine, in direct opposition to the relativistic point of view, with its explicit recognition of the Mind as an (we would rather, say *the*) active factor', vide, G. J. WHITROW,

Epistemological Foundations of Natural Philosophy, *Philosophy* 21.9, 1946.)

But at the level when the mind co-exists with the spatio-temporal patterns of activity in the cortex, this happening may not result, as the Mind then is free from *time*. This is perhaps the hidden symbolism of the description of Prahlāda's state of 'choiceless' Mind, according to Kampan, when Nṛsimha sought ferociously for the physical basis (i.e., protoplasm) of life in Hiraṇya (*Kaṇaka*). (See Kamaparāmāyaṇa, ed. by Gopalakrishnamachariar, Madras, 1932, Yuddhakāṇḍam; Part I, Verse 167, p. 148).

A NOTE ON THE STRUCTURE IN SPEECH

By

C. R. SANKARAN and P. C. GANESHSUNDARAM,

In our paper on structure in speech[1], we had occasion to refer to the Preliminaries by R. JAKOBSON and others[2], as a novel departure from the usual articulatory approach to speech-sounds. But in this note we propose to re-evaluate such a purely acoustic analysis of JAKOBSON and others in the light of the phoneme identification experiments of H. MOL and E. M. UHLENBECK[3] and thus demonstrate in a greater relief the main implication 'of the alpha-phonoid theory, viz., *acoustico-articulatory 'events'*, which the brilliant empirical investigations of JAKOBSON and others on one side and H. MOL and E. M. UHLENBECK on the other seem apparently to suggest. An attempt is, therefore, made to make yet another theoretical formulation comprising and reconciling at the same time the various experimental data of the most modern investigators whose approaches have been either predominantly articulatory or predominantly acoustical, albeit with improved techniques and a better and a fresher understanding of the entire problem.

We read, for example, in[3]: "When, for instance, in the 'Preliminaries' the remark is made that *a limited number of combinations of positions of the first three formants are significant for the identification of vowels* ([2], p. 19) one may wonder whether the Fourier analysis, i.e. a purely mathematical analysis of sound waves, has really any meaning for the auditory apparatus. Or in other words, whether it may be deemed plausible that the ear is capable of carrying out such an analysis in actual speech." (p. 172).

Paraphrasing, therefore, here what we have already said ([4], p. 197, footnote 4), in the light of the work of MOL and UHLENBECK ([3], p. 172) and v. BEKESY[5], it would appear that the presence of the "formants" ([3], pp. 172-173)[1] in the acoustic medium is purely 'incidental'

1. It will be of interest to compare the "formants" of vowels produced by the human voice and of those produced by a parrot. It is quite likely, that, as may be conjectured from the spectograms of the sound of birds[9], the "formants" of the 'parrot'—vowels may turn out to show a different relationship from those of the 'human'—vowels even when these vowels are identified as the 'same'.

It is significant that the parrot's hearing mechanism has been referred to in[8] (p. 176). Quite analoguous to its having only a rudimentary cochlea, the parrot has

from the point of view of speech-perception, even as the presence of the metallic gong is incidental in so far as the electrical circuit associated with the ringing of a bell is concerned.

The difference between the vowel and the consonant, thereby, ultimately reduces in essence to one of constancy and change within any specified small duration.[2]

This exemplifies that each acoustico-articulatory 'event'[2a] constitutes a type of regularity, in a deeper sense of the term which is *ultimate* and *non-causal*.[3]

only a small mouth cavity and it has no lips or teeth. But it does hear and articulate, however, imperfectly, the 'human' speech-sounds. Cf. also here [10] and [11].

2. Cf. here, for example,[3], p. 186: "Perhaps we may even say that these consonants are simply parts of the vowel." Cf. also [6], wherein consonants have been looked upon as the building up and interruption processes of the vowel vibrations. See also [5] and [7].

2a. Cf. [12], p. 37.

It is needless to emphasise once again that these acoustico-articulatory 'events' are really only 'instant-entities'. Cf. [13], p. 2.

Ultimately, the Veronesean continuum of time-order would perhaps resolve the 'chronon' concept. For, the mean life of a meson when at rest has been estimated to be 3.4×10^{-6} seconds. Also it has been calculated "that a menson of cosmic ray energy would travel in a vacuum an average distance of 9.5 kilometers occupying a time of 3.2×10^{-5} seconds before disintegrating. For a meson at rest, the mean life would then be about 2×10^{-6} seconds, the longer time for the moving one being due to the relativistic effect on time scales; the mean life of a meson has fixed value in that frame of reference in which it is at rest." ([14], pp. 718-719).

Adopting, therefore, the words of Hermann WEYL([15], p. 204), in his profound discussion of the law of entropy and time's arrow the deeper harmony of *time-instants* at such a level, giving a physical significance to the Veronesean continuum of time-order ([16], p. 95; [17], p. 41), and demonstrating thereby that even the highest and most abstract conception of mathematics will ultimately find a concrete application ([17], p. 28), triumphs over the obviously sluggish phenomenon of speech, albeit the fact that even here the significant indications can be discovered if we are sufficiently alert, as we have been ever attempting to show. For, it is only at the level of the life-time of mesons the "*punctiformity* or point-like character of total momentary experience'" ([18], p. 125) will be brought in full relief.

Our thanks are due to Shri. A. U. Momin of the Radiation Laboratory, Meteorological Department, Poona for many illuminating discussions in regard to this question.

It is to be noted that the conception of time-uncertainty, as "only a special application of Heisenberg's general uncertainty principle, to the particular case of *elementary* particles such as electrons, protons and mesons," ([19], p. 161) is at a level different from the one of our approach. (Cf. B. CHAITANYA DEVA'S Addendum to [1]; B. CHAITANYA DEVA and C. R. SANKARAN, [20]).

3. Cf. [8].

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[12] C. R. SANKARAN, *Phonemics of Old Tamil, Deccan College Monograph Series, No.* 7, 1951.

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[15] Hermann WEYL, *Philosophy of Mathematics and Natural Science*, Princeton, 1949.

[16] C. R. SANKARAN, A Philosophical Analysis of the Alpha-Phoneme Theory in Relation to the Problem of Speech-Structure, BDCRI, vol. 14, (1952) pp. 87-105.

[17] E. T. WHITTAKER, *From Euclid to Eddington*, Cambridge, at the University Press, 1949.

[18] H. A. C. DOBBS, The Relation between the Time of Psychology and the Time of Physics, *The Brit. J. for the Philos. of Science*, vol. 2 (1951).

[19] H. A. C. DOBBS, The Time of Psychology and of Physics, *The Br. J. Phil. Science*, vol. 4, (1953).

[20] B. CHAITANYA DEVA and C. R. SANKARAN, A Note on an Examination of the Nature of Structure, BDCRI, vol. 17, in press,

STUDIES IN DHVANYALOKA

(1) THE ADIVAKYA IN DHVANYALOKA

By

V. A. RAMASWAMI SASTRI

In the galaxy of Sanskrit poet-rhetoricians Ānandavardhana is one of the stars of highest magnitude. His *Magnum opus* the *Dhvanyāloka*—both the Kārikās and the Vṛtti[1]—is a work of great importance in the field of literary criticism in Sanskrit. His two poems[2]—*Viṣama-bāṇa-līlā* in prākṛt and *Arjunacarita* a mahākāvya, both mentioned in *Dhvanyāloka,* are of high poetic merits. His other work mentioned by him as Granthāntara[3] is probably a commentary on Dharmottara's work on Buddhism.

He is one of the outstanding authors of high repute who have combined in themselves the two faculties—the creative and the appreciative, and we see in India a chain of such scholars from the time of Vālmīki and Vyāsa, the two great epic-poets down to the time of the 17th century when the great poet-critic Jagannātha Paṇḍita flourished. Abinavagupta in his *Locana*[4] prays for the great lasting influence and power of these two great faculties in man, *Kavitva* and *Sahṛdayatva* which are considered the very essence of Goddess Sarasvatī. It has been an accepted principle both in the East and in the West that the critic is an *alter-ego* of the poet and that the critic's function in the realm of poetry and literary criticism is greater than that of the poet.

Ānandavardhana has a twofold task before him, one to refute the anti-dhvani doctrine expounded by some of his predecessors in the field like Bhāmaha and Daṇḍin and the other, to elucidate the dhvani doctrine as

1. There are a few scholars who believe that the *kārikākāra* and the *vṛttikāra* are different. Apparently in a few places the views expressed in *kārikās* and the *Vṛtti* are different as they are referred to in *Locana* but a few references in *Locana* and in *Abhinavabhāratī*; the commentary on *Nāṭyaśāstra*, chiefly indicate that they are identical and the references indicating difference show only the different capacities of the same person as the *Kārikākāra* and the *Vṛttikāra*. Vide *Upalocana*, Madras Edition, page 11; *Locana*, Bombay Edition, 2-1, page 60; pages 152 and 153.
2. Vide *Āloka* (Bombay Edition) page 62; page 241 for *Viṣambāṇalīlā;* page 148 for *Arjunacarita.*
3. Vide Locana, ibid, p. 233—'*granthāntare Viniścayaṭīkāyām dharmottarāyām yā vivṛtiḥ amunā granthakṛtā kṛtā*'.
4. Vide the first verse—'*sarasvastyās tattvam kavi-sahṛdakyayākhyam vijayate.*'

understood by Sage Bharata and other literary savants. Sage Bharata has explained in his work *Nāṭyaśāstra* that Rasa is the only vital element in Nāṭya—a dramatic representation. What he has said in reference to a dramatic representation can be well applied to all other kinds of literary works—Kāvyas. So Ānandavardhana enunciates the doctrine of Dhvani, viz, "Kavyasyā 'tmā Dhvaniḥ"[5]—Dhvani or suggestion is the soul of poetry. Any work of art, be it poetry, drama or any other, if it is not conducive to the readers' or spectators' enjoyment of Rasa or bhāva, ceases to be an art.

The Dhvani doctrine of Ānandhavardhana is not a new doctrine but only a further elaboration of the Rasa doctrine of Bharata '*budhais samāmnatapūrvah.' It elucidates* Rasa or Bhāva as always being suggested- *Vyaṅgya-* and not being expressed by its own words-svaśabdas.[6] It also accepts Rasa or Bhava-dhvani as the most important element in that it is *Viśrāntidhāman-* abode of the final beatitude, viz. the blissfull realisation of the most thrilling impersonal state of emotion-Rasānubhava. Great poets like Vālmīki, Vyāsa, and Kālidāsa, have clearly enunciated and practically demonstrated the same truth in their great poems which have thus become great store-houses of literary charm and aesthetic appeal to all later poets and literary critics.

Ānandavardhana appropriately begins his Vṛtti- Āloka- with a benedictoy verse which is explained by Abinavagupta in Locana[7] as a typical instance of the three main varieties of *dhvani- vastu, alaṅkāra* and *Rasa*. The verse runs thus :—

"Svecchākesariṇaḥ svaccha- svacchāyāyāsitendavaḥ /
trāyantām vo madhuripoh prapannārticchido nakhāḥ //"

"May the nails (of Lord Narasimha) who is the enemy of the demon Madhu and who has assumed the form of a lion at his own will, which (nails-) have by their own lustre put the moon to trouble and shame and cut off or remove the afflictions of the devotees—protect you!"

This verse contains a prayer for the divine protection—*trāṇa*—of the author and the readers who would study his work. This implies the

5. Vide the first *kārikā*—
'kavyasyā' tmā dhvanir iti budhair yas samānātapūrvaḥ
tasyā 'bhāvam jagadur apare bhāktam āhus tam anye/
kecid vācām sthitam aviṣaye tattvam ūcus tadīyam
tena brūmah sahṛdayamanaḥpritaye tatsvarūpam//
6. Vide *kārikā*4. *Āloka* pp. 148-156 (Madras edition).
7. *Locana*, ibid, pp. 11-25. Abhinavagupta says he has explained this verse as it was explained to him by his teacher Battendurāja whom he refers to in one of the introductory verses of *Locana*.

divine help for all by removing all obstacles in the successful completion of the work. It indicates that Lord Viṣṇu who is well-known as the protector of the world by destroying all demons like Madhu is ready to help our author; and so it suggests *utsāha*- enthusiasm on the part of Lord Viṣṇu, the *sthāyibhāva* of heroic sentiment—*vīrarasa*. Hence it is called an instance of *vīrarasadhvani*. The nails of the divine semihuman lion —*Narasiṁha*—are known generally as the instrument for protection but the description of them as agent suggests that the lion does not require anything other than its nails as the means of protection. The word *madhuripoḥ* suggests that Lord Viṣṇu is always engaged in the work- viz. the protection of the world. The epithet-*svecchā-kesariṇaḥ* suggests that He has assumed the form of a semihuman lion by His own will and not as the result of his past action, nor according to the will of other people. The epithet *Prapannārticchidaḥ* indicates that the divine nails have the extra-ordinary power to remove the sufferings of the afflicted millions of devotees though ordinary nails are not known as capable of destroying the sufferings of the people; or it may be said that *Hiraṇyakasipu* is the trouble incarnate and that he is destroyed by the merciful Lord *Narasiṁha* in order to save the world from all kinds of sufferings. Again, the epithet- *Svaccha- svacchāyāyāsitendavaḥ*- conveys the idea that the nails are pure and clear and by their pristine purity and beautifully curved form they have given the moon mental trouble by their unsurpassing beauty, thereby suggesting that the moon, being a crescent moon possesses beautiful curved form, yet it suffers a lot by the side of the divine nails owing to its lack of lustre and beauty; this helps for the suggestion of *Vyatirekālaṅkāra* which consists in the feelings of the moon that though it possesses lustre and curved form just like the nails, it is not capable of protecting afflicted devotees by removing their disablities.

Moreover, there are the suggestions of *Utprekṣā* and *Apahnuti* in this verse. They consist in the constantly tormenting experiences of crescent moon that till the time of the appearance of the divine semihuman Lion it possessed the pure and handsome form and as such it was liked by all people as the most beautiful object but subsequently the ten nails of Lord *Narasiṁha* are known not only possessing the beautiful form of the crescent moon but capable of the total destruction of the troubles of the devotees, so much so that the entire world worships them and not the moon.

Thus the verse lays down a solid foundation for the establishment of the dhvani-doctrine as the vital element of poetry.

The first kārikā in *Dhvanyāloka* is known as the *Ādivākya* in that it refers to the main theme of the work. First, it refers to the three anti-

dhvani schools as represented by *Abhāvavādins, Bhāktavādins* and *Anākhyeyavādins* and then the dhvani doctrine as the fundamental element in poetry which alone is capable of giving the transcendental pleasure to the readers. The whole of the first Udyota is devoted to the refutation of the anti-dhvani schools and to the elucidation of the definition of and the authorities on dhvani. The first kārikā— the *ādivākya*— thus explains the well- known *anubandhacatuṣṭaya*— chiefly *viṣaya* and *prayojana.*

First he observes that Dhvani is the soul of poetry and that it has been eluicdated and accepted as the vital element in poetry by learned people like Bharata, Vālmīki and Vyāsa. Then the views of the three Abhāvavādins[8] are referred to and further explained in *Āloka.* All of them totally deny the existence of dhvani from different points of view. The first Abhāvavādin says as follows[9] :—*Kāvya*—poetry—is nothing but a combination of words and their meanings—*Śabdārthamayam tāvad* kāvyam. The sābdas have certain well-known beautifying elements like *anuprāsa* and *yamaka*; so also the *arthas* have many figures of speech like *upamā* and *rūpaka;* so they are not *dhvani.* In addition to these, there are certain qualities—*guṇas*—of *saṅghaṭanā*—the combination of *śabdas* and *arthas* like *mādhurya*—sweetness which cannot be identified with dhvani. Hence they argue that since *dhvani* cannot be brought under the well-known *guṇas* and *alaṅkāras,* it does not exist. Their argument is put in the form of a syllogism in *Locana- Dhvanih guṇālaṅkāravyatirikto na bhavati, cārutvahetutvāt, nityānityadoṣā duśśravādaya iva* —Dhvani is not different from *guṇas* and *alaṅkāras* since it is a beautiful agent of poetry. Here the *vyāpti* is in the negative form—*vyatirekavyāpti-* as given below :—

yad guṇālaṅkāravyatiriktam tad cārutvahetu na bhavati, nityānityadoṣā asādhuduśśrava tvādaya iva—what is different from *guṇas* and *alankāras* cannot be considered a beautifying agent of *kāvya* just like the permanent or impermanent demerits of poetry like *asādhutva* and duśśravatva. But dhvani is to be accepted as the beautifying agent of poetry and so it cannot be different from the well-known *guṇas* and *alaṅkāras.*

The different kinds of styles of compositions belonging to *śabdas* and *arthas* like *upānāgarikā* and *vaidarbhī* are also well-known but they represent only different aspects of *śabda* and *artha.*

So the so-called *dhvani* is not a beautifying agent of poetry because it is different from *śabda* and *artha*; nor can it be considered a source

8. Vide *Āloka,* ibid, pp. 29 and 35, '*tasya sahṛdayajanamanaḥ-prakāśāmānasyā'pi abhāvam anye jagaduh. tad abhāvavādinām cā'mi vikalpah*'.
9. Vide *Āloka* and *Locana,* ibid, pp. 37-49.

of charm since it is different from *guṇas* and *alaṅkāras*. Even accepting *dhvani* as being realised as a source of charm in an extra-ordinary kind of cognition -*akhaṇḍabuddhi*—if one analyses its form, one cannot find it separately from the well-known *guṇas* and *alaṅkāras*. Hence there is no dhvani as the soul of poetry.

The second Abhāvavādin argues as follows[10] :—

Dhvani does not exist as the vital element of poetry. If it exists, It should be one of the beautifying elements like *guṇa* and *alaṅkāra* mentioned above; but it is different from it and so it is not the soul of poetry. *Kāvya* is generally defined as a combination of *śabda* and *artha* capable of producing pleasure in the minds of *sahṛdayas*—cultured people with a responsive heart. What is different from these *śabdas* and *arthas* and their accessories cannot be a beautifying agent or soul of poetry. It may exist outside the realm of poetry like *nṛtta* (dance-) and *gīta* (music). Even the argument that a few are capable of understanding *dhvani* as the vital element of *kāvya* falls to the ground because it does not appeal to all learned people alike. They put their argument in a syllogistic form :—*vimato dhvaniḥ na kāvyaśabdagocaro bhavitum arhati, tadvācyaguṇ-ādivyatiriktatvāt, nṛttagītādivat*—dhvani under discussion cannot be brought under any element of poetry since it is different from *guṇas* and others associated with *kāvya*, just like *nṛtta* and *gīta*.

The third Abhāvavādin asserts as follows :—[11]

Dhvani may be accepted as the beautifying agent of poetry but it is not different from the well-known *guṇas* and *alaṅkaras*. The argument that nobody has yet pronounced dhvani as the soul of poetry though it is included under the *guṇas* and *alaṅkaras*, falls to the ground since it is only a further interpretation or elaboration of what already exists; it is not an enunciation of a new doctrine as the Dhvanivādin contends. If dhvani is a beautifying agent of poetry, it should merge under the *guṇas* and *alaṅkaras*. To give it a new name does not help one to prove that it is a new doctrine. The words, their meanings and their modes of expressions in poetry are numerous and they are in detail explained by Bhāmaha and others; and since they have not elucidated dhvani it is not acceptable; a few of course who have the illusion that dhvani is the soul of poetry actually revel at it and dance in merriment; truely speaking, there is no reason for it. Great people have explained in so many ways different *alaṅkāras* and their varieties—some in general terms and some in particular terms and it cannot be said that they have discovered

10. Vide *Āloka* and *Locana*, pp. 50-54.
11. Vide *Āloka* and *Locana*, pp. 55-58.

a new thing in poetry. So it is concluded that dhvani is an illusion and nobody is able to explain its truth beyond the scope of guṇas and alaṅkāras.

To this effect is quoted by Ānandavardhana a verse[12] of the poet-critic Manoratha, an elder contemporary of Ānandavardhana—which explains that there is nothing in dhvani beautifying on conducive to pleasure; it is different from *arthālaṅkāras;* nor does it contain any *śabdā-ālaṅkāra*; nor does it possess *vakrokti* or any *saṅghaṭanā-dharma;* yet the Dhvanivadin contends that *kāvya* contains dhvani as its vital element, praises it to heaven, but alas! one is not able to understand or appreciate it.

These three abhāvavādas are not independent of one another, nor they represent three separate schools;[13] they are inter-linked and even help each other in denying the existence of dhvani. The perfect form *'jagaduh'* in the *kārikā* may indicate that the *abhāvavāda* was not existent or popular during the time of Ānandavardhana unlike the *bhāktavāda* the existence of which is indicated by the present tense in *'āhuḥ'*.

The *bhāktavādin* also denies the separate existence of dhvani like the abhāvavādin but argues that it actually merges into *bhakti* otherwise known as *upacāra* or *lakṣaṇā.*[14] He explains the scope of *bhakti* in such a way that it includes dhvani in some instances. The term *bhākta* is interpreted as—'[15] *bhajyate sevyate padārthena prasiddhatayā utprekṣyate iti bhaktiḥ dharmah abhidheyena sāmīpyādih; tata āgato bhākto lākṣaṇiko 'rthaḥ. Bhākta* is the secondary sense of the word associated with its primary sense by *neighbourhood* and the like as in the popular illustration *'gaṅgāyām ghoṣah'* where the secondary sense *'bank'* has the relation of *neighbourhood* to the primary sense *'current'*. Similarly other relations are also cited such as *sārūpya*—Similarity—in the illustration *'agnir māṇavakaḥ'* where similarity or possession of the same qualities of the fire by *māṇavaka* is found; *samavāya* or contact as in the example *'yaṣṭīḥ praveśaya'*; vaiparītya or the opposite nature of the primary and secondary meanings as in the example *'darśah'* in the sense of new-moon day; and *kriyāyoga* or *kāryakāraṇabhāva* (the causal relation) in the example *'prāṇān ayam apaharati'* used when one takes away another's food. These ideas are summarised in the kārikā of Ācārya Bhartṛmitra—

12. *'yasminn asti na vastu kiñcana manaḥ-prahlādi sālaṅkṛti
vyutpannai racitam ca yan na vacanair vakroktiśūnyam ca yat/
kāvyam tad dhvaninā samanvitam iti prītyā praśaṃsan jaḍo
no vidmo 'bhidadhāti kim sumatinā pṛṣṭah svarūpam dhvaneḥ//'*
13. Vide *Locana*, ibid, pp. 61 and 62.
14. Vide *Āloka* and *Locana*, pp. 62-69.
15. Vide *Locana*, pp. 62-70. Vide also the author's paper on *'Mukhya and Gauṇa words in Language'*. (Bulletin of the Deccan College Research Institute, 14,183 ft. 1952-53.

'abhidheyena sāmīpyāt sārūpyāt samavāyataḥ /
vaiparītyāt kriyāyogāt lakṣaṇā pañcadhā matā//'

Bhākta is also explained as that secondary sense of the words like *simha* the usage of which is based on the group of qualities like sharpness, valour, etc, conveyed by it—*'guṇasamudāyavṛtteś* ca sābdasya arthabhāgas taikṣnyādir bhaktih; tata āgato gauṇo'rtho bhāktah. It is also explained as that which is used to convey the *prayojana* element for which the secondary usage is noted, as in the example—*'gaṅgāyām ghoṣah* where the coolness and sanctity of the Ganges are associated with bank, the secondary sense of the word. Again the term bhāktaḥ is interpreted as that which is based on the sublation of the primary sense of the word in the context; so *bhakti* means *bhaṅga* or *bādhā*—sublation.

From these explanations it is clear that *bhakti* or *upacāra* (secondary usage) has three conditions—(1) the sublation or the incompatability of the primary sense in the context—*mukhyārthabādhā* (2) the condition—*nimitta*—in the form of relations like *sāmīpya* as explained above (between the primary sense and secondary sense) and (3) the purpose—*prayojana*—of such a usage. Thus the bhāktavādin argues that many instances of dhvani particularly the variety of *avivakṣitavācya* do come under *bhakti* or *upacāra*. The argument that dhvani is based on upacāra and not identical with it in the well-known examples of *avivakṣitavācya* like *'nihsvāsāndha ivā' darśah'* falls to the ground in that all ideas other than the primary sense of the word can be brought under *bhakti* or *upacāra*, so much so that there is no ground for accepting a third *vyāpāra* like dhvani, though the dhvanivādin argues that in such instances the scope of dhvani is different from that of upacāra or lakṣaṇā.

Bhāmaha has enumerated the chief requisites to a *kāvya* in the verse :[16].

'śabdaś chando'bhidhānārtha itihāsāśrayāḥ kathāh/
loko yuktih kalāś ceti mantavyāḥ kāvyahetavaḥ//'

Here the word 'abhidhāna' is interpreted by his commentator Udbhata as the potencies of śabda—(1) the primary significatory power generally called *abhidhāśakti* and (2) the *guṇavṛtti* also known as *upacāra* or *lakṣaṇā*. There, no other potency is mentioned as the third *vyāpāra* of śabda. So the bhāktavādin's contention is that though there is dhvani in certain instances of kāvya it should merge under *guṇavṛtti*. No doubt Bhāmaha, Daṇḍin, Vāmana, Udbhaṭa and others who have preceded Ānandavardhana have recognised the dhvani element in kāvya particularly *Rasa* and *Bhāva* already expounded by Sage Bharata in his *Nāṭyaśāstra* but they have not been able to understand correctly

16. *Kavyālaṅkāra*, verse I-9 and Locana, pp. 67 and 68.

the full significance and importance of the suggestiveness of *Rasa* and *Bhāva* and they have reduced their position as subordinate to *śabda* and *artha* constituting *kāvya* like figures of speech. Though they were able to know it in a general and vague manner, yet they doubt in their existence as separate from *guṇavṛtti* and try to conceal it—*manākspṛṣṭo, pi na lakṣyate*. All these ideas are put in a brief and suggestive manner in the *kārikā*—'*bhāktam āhus tam anye.*'

The *anākhyeyavadin*[17] recognises the separate existence of *dhvani* as known to all *sahṛdayas* but says it is indefinable and indescribable thereby indicating his incapacity and helplessness on the matter—"*kecid vācām sthitam avisaye tattvam ūcus tadīyam.*"

Thus these three anti-dhvani schools stand in a grade of superiority of the latter to the former—the *bhāktavadin* doubts and conceals the separate existence of dhvani though he understands it in a vague manner and as such, he is better than the *abhāvavādin* who completely denies its existence; the *anākhyeyavādin* fully recognises its separate existence and does not entertain any doubt or does not try to conceal it just like the *bhāktavādin* and so is better than the bhāktavādin.

Thus Ānandavardhana has referred to these anti-dhvani schools in his *ādivākya* and explained them further in his own *Vṛtti—Āloka*[18]—and thus has justified his attempt in his work *Dhvanyāloka* to elucidate the doctrine of dhvani in a two-fold manner, one, to establish its separate existence and two, as the vital element or life of poetry—'*tena brūmaḥ sahṛdayamanaḥprītaye tatsvarūpam*'. It may be observed here that *dhvani* or suggestive power is not merely a *śabdavṛtti* like *abhidhā* or *lakṣaṇā*, but is the *arthavṛtti* also, so much so its scope cannot be exactly measured.

The expression '*sahṛdayamanaḥprītaye*' in the kārikā explains the chief aim of poetry, viz; the mental pleasure of the *sahṛdayas*, otherwise called the *aesthetic pleasure* comparable only to *brahmānanda*. The *sahṛdayas* are those art-critics who have been naturally gifted with a responsive heart and possess a unique capacity to identify themselves with the characters described, acquired by a particular training and by the constant study of the poems or by witnessing dramas on the stage—'*yeṣāṃ kāvyānuśīlanābhyāsavaśāt viśadībhūte manomukure varṇanīyatanmayībhavanayogyatā te svahṛdayasaṁvādabhājas sahṛdayāḥ*'.[19] And this pleasure can be invariably derived from kāvya only when the creative artist possessing *pratibhā* follows the path of dhvani which would afford to him many opportunities to delineate Rasas and Bhavas and

17. Vide *Āloka* and *Locana*, pp. 70-72.
18. Vide *Locana*, pp. 71-83.
19. Vide *Locana*, pp. 77 and 78.

characters even in a novel and attractive way, with the result that the readers or spectators would not feel any tedium while reading a poem or witnessing a drama on stage, though their theme is well-known. Hence Ānandavardhana calls dhvani the most sublime and beautiful inner secret of the treasure-like poems of all great artists—'*sakalasatkavi-kāvyopaniṣadbhūtam atiramaṇīyam*', which has not however made any appeal to the fertile brains of a few ancient critics like Bhāmaha but has been richly and favourably expounded and practically demonstrated in the great epics *Rāmāyaṇa* and *Mahābhārata* of the two *Ādikavis* and *Ādisahṛdayas*—śrī Vālmīki and śrī Vyāsa and the poems and dramas of Kālidāsa, the prince among the great classical poets.

The statement in the *Āloka*—'ānando manasi labhatām pratiṣṭhām' expressly states that it is the transcedental pleasure which is technically known as *Rasadhvani* or Rasacarvaṇā which is considered the chief aim of poetry since it is *viśrāntidhāman*—the abode of final beatitude; and the author prays that it may be given its proper place by all critics in the realm of poetry. It may also indicate that Ānanda viz; the author Ānandavardhana may be correctly understood and recognised as the true interpreter of poetry while he establishes *dhvani*—suggestion—as the soul of poetry and that he may enjoy a lasting and permanent place in the hearts of *sahṛdayas* as the emperor of art-critics—*Sahṛdayacakravartin.*

There are other *prayojanas* of kāvya—fame, knowledge of of the four human values-*puruṣārthas* and of fine arts etc., but all these finally lead to pleasure.[20] That is why poetry is distinguished from the mandatory Vedas which like a monarch give instructions on moral and spiritual duties to be followed by mankind lest it should suffer divine punishment; and from the *Itihāsas* and *Purāṇas* giving the same advice by narrating stories like a well-meaning friend; but poetry gives instructions just like a beautiful and dutiful wife on the same in a charming and a more appealing manner.

The very fact that Indian poetry aims at the twofold purpose, viz; to give impersonal and transcendental pleasure to the readers by the delineation of *rasas* and *bhāvas* and incidentally *vastus* also and to give moral and spiritual instructions to the readers by delineating the lives of noble characters like Sri Rāma, King Duṣyanta and Nala whose examples are fit to be followed for their magnanimous, self-sacrificing acts which are also beyond reproach. This twofold aspect of Sanskrit poetry may well explain the happy and hormonious medley of *idealism* and *realism* in literature.

20. Vide, *Locana*, pp. 80-83.

REVIEWS

Buddhist Hybrid Sanskrit (Language and Literature): Ten Public Lectures by Franklin EDGERTON, Banaras Hindu University, Banaras, 1954, pp. 88.

These are the ten public lectures delivered by EDGERTON in fulfilment of one of the conditions of the Holkar Visiting Professorship at Banaras which he occupied during 1953-54. EDGERTON had already made himself known as a savant deeply interested in the study of Buddhist Hybrid Sanskrit by bringing his patient research in the subject to a fruitful culmination by publishing in 1953 the Buddhist Hybrid Sanskrit Grammar, Dictionary, and Reader in three volumes (Yale University). The Banaras Hindu University, therefore, could have found no better person than EDGERTON himself to speak on the subject so carefully studied by him.

Buddhist Hybrid Sanskrit is the name invented by EDGERTON to describe the language used by the north Indian Buddhists for their religious literature. The purpose of the present series of lectures, as mentioned by the lecturer himself, is not a scholarly and detailed presentation of the subject—that being already achieved in the Yale University publications referred to above—but to offer to a wider public a general survey of the literature and some of the salient features of that language which holds a somewhat peculiar position midway between the standard Sanskrit and a middle Indian dialect. The treatment given to the subject is therefore selective, not exhaustive.

Lectures 1 and 7 are important as they give the lecturer's views on the nature of the Buddhist Hybrid Sanskrit and its relationship with the other middle Indic dialects. In this regard, the lecturer has two points to make. The one is that BHS is basically a *middle Indic* dialect, and it is not, as was erroneously assumed by some, a bad or corrupt Sanskrit. It has, however, to be remembered that this applies not to the literary language as we have it preserved today—for in its present form it is highly Sanskritised in many works—but only to the dialect which lies at the bottom of these texts. The next point which the lecturer intends to stress is that this underlying middle Indic dialect is quite an independent one and that it cannot be properly identified with any one of the known middle Indian dialects including Pāli. He has arrived at this conclusion on the strength of certain peculiar characteristics of BHS (summarised in lecture 7), which, in his opinion, are not to be met with

in other MIA dialects. He also now gives up his earlier view that BHS has close relations with Ardhamāgadhī, the sacred language of the Jains (*BSOS* 8.501 ff.)

A useful survey of BHS literature, which represents both the Mahāyāna and the Hīnayāna schools of Buddhism, is given in the lectures 2-6. Quite appropriately the lecturer devotes some more time to such important works as the *Mahāvastu*, the *Lalitavistara*, and the *Saddharmapuṇḍarīka*. Lectures 8-10 present what the lecturer calls 'the normal grammar' of the dialect underlying BHS. For the sake of convenience he omits here the very rare and sporadic forms which he has already dealt with in his big grammar. The lecturer convincingly shows that the study of metre is very essential if we wish to get a correct picture of the phonology (and also of morphology) of BHS especially in respect of the length of vowels and the pronunciation of clusters at the beginning of the words. The metrical evidence clearly shows that at bottom BHS pronunciation was middle Indic, whatever the form in which the words appear in the manuscripts to-day. An instance of how a systematic study can lead to correct interpretations is to be found on p. 86 where the lecturer points out that the tendency observed in BHS to form denominatives like *buddhati* etc. from the past passive participles shows that the Pāli and the Prākṛta *laggati* cannot come from **lagyati* (as was supposed by GEIGER § 136 (2) and PISCHEL § 488) but from *lagnati*. But what the lecturer says about the genesis of the loc. sg. of *-a* stems in *-esmiṁ* etc. may not be the case. He regards, for instance, a loc. sg. form like *lokesmiṁ* as a blend-form, a cross between the two loc. forms *lokasmiṁ* and *loke*. It might, however, be investigated if the starting point of such locatives was not a frequent use of *loke* and *asmiṁ* together which resulted into *loke(a)smiṁ*.

In lecture 1 as well as on p. 61, the lecturer refers to his theory that it is not possible to speak of one original language of the Buddhist canon. On his own admission "Many of these canonical works no doubt went back to the earliest times, and were carried everywhere in similar forms; but there is, as we saw in our first lecture, no reason to assume linguistic unity even in the texts as they were thus spread by missionaries; there is no reason to assume any single 'original language of Buddhism' (p.61)." However, the attitude of the Buddha towards the use of various languages as vehicles for religious propaganda, to which the lecturer refers in his first lecture, is not against the hypothesis of there being one language of the original canon. It only shows that the Buddha was definitely against this 'original canon' itself being imposed on his disciples at all places in India; he was, on the other hand, in favour of the use of the regional

languages for the further propagation of his teachings which originally could only be in one language. In a recent publication *Beobachtungen Über Die Sprache Des Buddhistischen Urkanons* (edited by E. WALDSCHMIDT), LUEDERS has demonstrated that the original canon was composed in an easternly dialect. The students of the MIA dialects will eagerly await Prof. EDGERTON'S reactions to this new data presented by LUEDERS.

—M. A. MEHENDALE.

Excavations at STAR CARR by J. G. D. CLARK, 200 pp., 24 plates and 80 figures in the text. (Cambridge University Press, Cambridge 1954, 63 s.).

Star Carr is near the fashionable seaside resort of Scarborough, Yorkshire in north-eastern England. Its excavation was undertaken by Professor CLARK on behalf of the University of Cambridge, and carried out with the help of several University students during the summers of 1949-51. Careful, total excavation and the most detailed recording of the evidence enables Dr. CLARK and his colleagues to give an indication of the size, character, and age of the settlement. It was a comparatively small habitation, about 220-240 yards in area, made by "the throwing down of birch brushwood, stones and wads of clay. There were no piles to consolidate it, nor were there any traces of actual habitations." Of course there might have been reed huts or skin tents which have perished witout leaving any trace. Its inhabitants were hunter-fishers. But they do not continuously seem to have occupied it. It was inhabited for periods during mid-winter (January) and spring (April) and abandoned during the summer. A study of all the bones and their interpretation in terms of animals represented, as well as a careful comparison of the size of the modern primitive settlements with those known from the Mesolithic sites in Europe, suggests that the Star Carr could not have supported more than four or five families at a time. And according to a radiocarbon test of the birchwood sample, the absolute age of the settlement in times of solar years is 9488 + 350 years or 7538 + 350 B.C.

Among other details, emphasis must be laid on the rich harvest of tools of flint, bone and antler. On one microlith was found resin still sticking to it, illustrating thereby how it was hafted on a bone or a wooden shaft. This lends additional confirmation to the evidence from Palestine, Egypt and Iraq.

It is a most welcome publication for several reasons. In the first place certain elements of the material culture such as the technique of making barbed harpoons from stag antler provide "a real link between

the Upper Palaeolithic and the previously known Mesolithic cultures of north-western Europe." This is further indicated by the absence of dog and the lakeside character of the Star Carr settlement, for its hunter-fishers like the reindeer hunters of the last stage of the glacial period encamped by the edge of ponds and lakes. On the other hand, the discovery of a wooden paddle—"the earliest trace of a navigational appliance yet discovered"—as well as certain other items of the material culture, and climatic and vegetation characteristics herald the arrival of the North Sea coastal cultures known as the Maglemosian.

Secondly, for its inter-disciplinary approach. From preliminary field work to final publication Dr. CLARK had the fullest co-operation of of his colleagues in the University as well as from the British Museum, so that it has been possible to have as full an idea of the environment—geographical, climate, vegetational, animal, economic and social—of these hunter-fishers, who lived in the 8th millennium B.C.

Thirdly the advisibility of a total excavation of a site. Of course, this is more easily possible in the case of a site like Star Carr, which was small in size, and the thickness of its debris not much.

Fourthly, the importance of excavating sites capable of throwing light on animal and plant life and on the utilization by man of the organic materials they provide.

The last two, as well as the fullest co-operation from Natural Scientists, including Nuclear Physicists, can not only help to illuminate the economic and social realities which underlie prehistory, but also explain the need and value of prehistoric studies in any country, whether it be Britain or India.

H. D. SANKALIA.

Kānhaḍade-Prabandha by Padmanābha: an early Western Rājasthāni poem: critically edited by Prof. Kantilal Baladevaram VYAS, M.A., Head of the Department of Gujarati Language and Literature, Elphinstone College, Bombay: with an introduction by Āchārya Muni Śrī JINAVIJAYAJI, Honorary Director, Rājasthān Purātattva Mandira, Jaipur; published under the orders of the Government of Rājasthān by Rājasthān Purātattva Mandira, 1953; pages 8+33+275: price Rs. 9/8/-.

The publication of this work may be looked up as quite an event in Gujarātī and Rājasthānī studies. Here we have at last a very careful and well-authenticated edition of what may be considered to be a great

classic in New Indo-Aryan Literature. *Kānhaḍade-Prabandha* is a narrative poem, which is both romantic and heroic, on the stand made by the Chauhāṇ King of Jhālor in Southern Rājasthān against the onslaught by the Turks and Pathāns and North Indian Muslims from Delhi under Alauddin Khilji and his generals. It depicts the circumstances which led to the Delhi Sultan's sending expeditions to Gujarat, and how the Rajputs of Jhālor under Kānhaḍade (or Krishna Deva) refused to co-operate with the Muslim invaders; it narrates further how after the aggressors had conquered Gujarat, they turned their attention to Jhālor, how the Rājputs there offered resistance and maintained their independence for a number of years against successive attempts to force them, and how finally after deeds of super-human valour they were conquered by treachery, and then the Rajput women performed the terrible rite of Jauhar and immolated themselves after Kānhaḍade himself was killed. His son Viramde fought on, but he too was killed, and the Turks could enter into Jhālor which had become just a desolate shambles for them. The poem is of great merit as a patriotic work as well as a work of high literary value, and Muni Śrī JINAVIJAYAJI in his brief introduction has dwelt upon this aspect of it specially.

In the present volume, the interested public, not only among Rājasthānī and Gujarātī people, for whom the work is of primary interest, but also among students of other New Indo-Aryan languages and literatures, will feel grateful for the very ably edited critical text which Prof. VYAS has given us. This important work came to the notice of scholars as early as 1877, and the first tentative edition of it, based on a manuscript copy prepared at the instance of Dr. BUEHLER, was published by Navalrām Lakshmirām PANDYA. It was noted by all persons interested in the history and culture of Gujarat, and in 1913 the late Mr. Dāhyābhāi P. DERASARI brought out the first critical edition based on five manuscripts. This edition had a reprint in 1926 with a few alternative readings later on accepted by the editor. So long the edition of DERASARI was our only easily available source for the study of this work. Now, after 14 years of labour, Prof. VYAS has given us a definitive edition which can be expected to remain the final one, at least for some time to come, of this work, and he has based it on all the manuscripts which he has been able to procure (11 in number). The writer flourished in the 15th-16th centuries, and of the manuscripts the oldest was written in A.D. 1541, 86 years after the date of the composition. Prof. VYAS has in a very detailed account of the methods he has followed in establishing his text given a pedigree of the various manuscripts, and he has left nothing undone to establish a text as near to the original as it is humanly possible with the

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materials at our disposal. This is a refreshing instance of the scientific principles of manuscript study in actual operation.

The work belongs to a period (15th century) when Rājasthānī and Gujarātī had not differentiated from each other and they were just dialects of the same speech to which the late Dr. L. P. TESSITORI, the Italian scholar who first made a scientific study of it, gave the name of "Old Western Rājasthānī"; and although some specific Rājasthānī and Gujarātī traits were showing themselves in literature, their differentiation and final expression as two dstinct languages took place during the following two centuries. Naturally a work like this can be claimed by speakers of both Rājasthānī and Gujarātī as a classic in their respective languages. But because the work has been taken in hand in Rājasthān and because Jhālor, the home of the poet, belongs to Southern Rājasthān, the work has been declared in the introduction as being Early Rājasthānī; and Prof. VYAS has also lent some support to this labelling. His statement in this connexion may be quoted:

"It is an undisputed fact that Old Western Rājasthānī which can be called either Old Gujarātī or Old Rājasthānī, was the speech of a wide area, which included both North Gujarāt and Southern and Western Rājasthān including a part of Mālwā. The form of speech used in Gujarāt and Rājasthān then reveals just dialectical variations almost like the Kāṭhiāwādī and Surtī dialects of Modern Gujarati. This poem, belonging, as it does, to Southern Rājasthān, must have contained numerous Rājasthānī traits in the original. In restoring the text I have thought it necessary to give preference to Rājasthānī forms found in Rājasthānī manuscripts like AKL, or characteristically Rājasthānī forms in other manuscripts such as those encountered in Old Rājasthānī classics like *Dholāmārurā Duhā* or *Gorā Bādal Padamaṇī Chaupāī*".

We are indeed grateful to Prof. VYAS and to the Rājasthān Purātattva Mandira for giving to the interested world this beautiful edition of a very fine work which should be known all over India. Prof. VYAS has promised in his second volume a complete translation of the poem with a discussion of its historical and linguistic background and a full Index Verborum, and possibly also critical and explanatory notes. This will be awaited with great expectancy by those who are interested in this work, and it will be invaluable production for both the Philologist and Historian of Culture and Literature, as well as for the Student of Linguistics.

Suniti Kumar CHATTERJI

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